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Asn Ser Ser Thr Glu Ala	Asn Val Ile Lys Glu Ala Leu Asp Ser Ser			
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Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn				
	85	90	95	
Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile				
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Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys Ser Lys Thr Pro Pro Met				
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Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr				
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His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro				
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Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr				
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Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu				
	180	185	190	
Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn				
	195	200	205	
Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu				
	210	215	220	
Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp				
	225	230	235	240
Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn				
	245	250	255	
Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly				
	260	265	270	
Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu				
	275	280	285	
Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu				
	290	295	300	
Val Ile Lys				
305				

&lt;210&gt; 2763

&lt;211&gt; 2210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

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180

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240

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<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Gly	Val	Ile	Asp	Pro	Gly	Met	Glu	Tyr	Val	Pro	Pro	Pro	Ala	Gly	Ser
			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
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Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
				85					90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100						105					110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
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Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
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Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
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Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
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His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
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Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235					240
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
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Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
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	290					295						300			
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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 Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg  
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 Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys  
 355 360 365  
 Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met  
 370 375 380  
 Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp  
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<210> 2765  
 <211> 582  
 <212> DNA  
 <213> Homo sapiens

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<210> 2766  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2766  
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 20 25 30  
 Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr  
 35 40 45  
 Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

50		55		60	
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys	Phe Leu Asp Leu Pro			
65	70	75	80		
Ser Leu Ala Leu Cys	Trp Pro Gly Asp Ser Gly	Asp Ala Glu Trp Pro			
	85	90	95		
Glu Ala Gly Ser					
	100				

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

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1202

<210> 2768  
<211> 282  
<212> PRT  
<213> Homo sapiens

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35 40 45  
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys  
50 55 60  
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser  
65 70 75 80  
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln  
85 90 95  
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro  
100 105 110  
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser  
115 120 125  
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser  
130 135 140  
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr  
145 150 155 160  
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe  
165 170 175  
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly  
180 185 190  
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val  
195 200 205  
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys  
210 215 220  
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala  
225 230 235 240  
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly  
245 250 255  
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Val Ala Ser Gln Gln Phe Gln Phe Leu Ala  
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<210> 2769  
<211> 1286  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2770

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2770

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Ala	Glu	Lys	Val	Glu	Ala	Leu	Pro	Glu	Gln	Val	Ala	Pro	Glu	Ser	Arg
			20					25					30		
Asn	Arg	Ile	Arg	Val	Arg	Gln	Asp	Leu	Ala	Ser	Leu	Pro	Ala	Glu	Leu

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 Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile  
 65 70 75 80  
 Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His  
 85 90 95  
 Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr  
 100 105 110  
 Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro  
 115 120 125  
 Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr  
 130 135 140  
 Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile  
 145 150 155 160  
 Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp  
 165 170 175  
 Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr  
 180 185 190  
 Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu  
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 His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala  
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<210> 2771

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2771

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<210> 2772

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35				40					45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
			50			55					60				
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
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Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

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Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe Gly Pro Trp Lys
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&lt;210&gt; 2773

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2773

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&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2774

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&lt;210&gt; 2775

&lt;211&gt; 3139

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2775

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<211> 370

<212> PRT

<213> Homo sapiens

<400> 2776

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His	Gln	Glu	Ser	Thr	Glu	His	Val	Leu	Ser	Gly	Gly	Val	Val	Val	Ser
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&lt;213&gt; Homo sapiens

&lt;400&gt; 2777

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8625

&lt;210&gt; 2778

&lt;211&gt; 1146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

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Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe  
50 55 60  
Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp  
65 70 75 80  
Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys  
85 90 95  
Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser  
100 105 110  
Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp  
115 120 125  
Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe  
130 135 140  
Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser  
145 150 155 160  
Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu  
165 170 175  
Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys  
180 185 190  
Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp  
195 200 205  
Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn  
210 215 220  
Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val  
225 230 235 240  
His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser  
245 250 255  
Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp  
260 265 270  
Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His  
275 280 285  
Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg  
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Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr  
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325 330 335  
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340 345 350  
Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu  
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Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys  
370 375 380  
Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

385					390					395				400
Met	Arg	Val	Gly	Lys	Thr	Val	Ala	Gln	Lys	Leu	Thr	Asp	Glu	Leu
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Ser	Glu	Trp	Phe	Asn	Gln	Pro	Trp	Ser	Gly	Glu	Glu	Asn	Asp	Asn
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Tyr	Gln	Thr	Pro	Pro	Ala	Ala	Ala	Gln	Gly	Gln	Ala	Thr	Pro	Gly
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Ala	Gly	Pro	Leu	Ala	Pro	Asn	Gly	Ser	Ala	Ala	Pro	Pro	Ala	Gly
			485					490						495
Ala	Phe	Asn	Pro	Thr	Ser	Asn	Ser	Ser	Ser	Thr	Asn	Pro	Ala	Ala
			500				505						510	Ser
Ser	Ser	Ala	Ser	Gly	Ser	Ser	Val	Pro	Pro	Val	Ser	Ser	Ser	Ala
	515					520						525		Ser
Ala	Pro	Gly	Ile	Ser	Gln	Ile	Ser	Thr	Thr	Ser	Ser	Ser	Gly	Phe
	530				535						540			Ser
Gly	Ser	Val	Gly	Gly	Gln	Asn	Pro	Ser	Thr	Gly	Gly	Ile	Ser	Ala
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Arg	Thr	Gln	Arg	Asn	Ile	Gly	Cys	Gly	Gly	Asp	Thr	Asp	Pro	Gly
			565					570						575
Ser	Ser	Ser	Gln	Pro	Ser	Gln	Asp	Gly	Gln	Glu	Ser	Val	Thr	Glu
		580					585						590	Arg
Glu	Arg	Ile	Gly	Ile	Pro	Thr	Glu	Pro	Asp	Ser	Ala	Asp	Ser	His
	595				600							605		Ala
His	Pro	Pro	Ala	Val	Val	Ile	Tyr	Met	Val	Asp	Pro	Phe	Thr	Tyr
	610				615						620			Ala
Ala	Glu	Glu	Asp	Ser	Thr	Ser	Gly	Asn	Phe	Trp	Leu	Leu	Ser	Leu
625					630					635				640
Arg	Cys	Tyr	Thr	Glu	Met	Leu	Asp	Asn	Leu	Pro	Glu	His	Met	Arg
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Ser	Phe	Ile	Leu	Gln	Ile	Val	Pro	Cys	Gln	Tyr	Met	Leu	Gln	Thr
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Lys	Asp	Glu	Gln	Val	Phe	Tyr	Ile	Gln	Tyr	Leu	Lys	Ser	Met	Ala
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Ser	Val	Tyr	Cys	Gln	Cys	Arg	Arg	Pro	Leu	Pro	Thr	Gln	Ile	His
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Lys	Ser	Leu	Thr	Gly	Phe	Gly	Pro	Ala	Ala	Ser	Ile	Glu	Met	Thr
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Ile	Leu	Ala	Pro	Ile	Lys	Asp	Lys	Gln	Thr	Glu	Leu	Gly	Glu	Thr
		740					745						750	Phe
Gly	Glu	Ala	Ser	Gln	Lys	Tyr	Asn	Val	Leu	Phe	Val	Gly	Tyr	Cys
	755						760					765		Leu
Ser	His	Asp	Gln	Arg	Trp	Leu	Leu	Ala	Ser	Cys	Thr	Asp	Leu	His
	770				775						780			Gly
Glu	Leu	Leu	Glu	Thr	Cys	Val	Val	Asn	Ile	Ala	Leu	Pro	Asn	Arg
785				790						795				800
Arg	Arg	Ser	Lys	Val	Ser	Ala	Arg	Lys	Ile	Gly	Leu	Gln	Lys	Leu
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Glu	Trp	Cys	Ile	Gly	Ile	Val	Gln	Met	Thr	Ser	Leu	Pro	Trp	Arg

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 Val Ile Gly Arg Leu Gly Arg Leu Gly His Gly Glu Leu Lys Asp Trp  
 835 840 845  
 Ser Ile Leu Leu Gly Glu Cys Ser Leu Gln Thr Ile Ser Lys Lys Leu  
 850 855 860  
 Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser  
 865 870 875 880  
 Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val  
 885 890 895  
 Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr  
 900 905 910  
 Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser  
 915 920 925  
 Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala  
 930 935 940  
 Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp  
 945 950 955 960  
 Met Phe Val Asp Leu Pro Phe Pro Asp Asp Met Asp Asn Asp Ile Gly  
 965 970 975  
 Ile Leu Met Thr Gly Asn Leu His Ser Ser Pro Asn Ser Ser Pro Val  
 980 985 990  
 Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln  
 995 1000 1005  
 His Ser Arg Ser Gln Gly Glu Arg Leu Leu Ser Arg Glu Ala Pro Glu  
 1010 1015 1020  
 Glu Leu Lys Gln Gln Pro Leu Ala Leu Gly Tyr Phe Val Ser Thr Ala  
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 Lys Ala Glu Asn Leu Pro Gln Trp Phe Trp Ser Ser Cys Pro Gln Ala  
 1045 1050 1055  
 Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile  
 1060 1065 1070  
 Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg  
 1075 1080 1085  
 Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe  
 1090 1095 1100  
 Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala  
 1105 1110 1115 1120  
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 1140 1145

&lt;210&gt; 2779

&lt;211&gt; 2461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2779

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 2461

<210> 2780

<211> 720

<212> PRT

<213> Homo sapiens

<400> 2780

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Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp	40	45	50	55
Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu	60	65	70	75
Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala	80	85	90	95
Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln	100	105	110	115
Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser	120	125	130	135
Arg	Lys	Tyr	Ser	Gly	Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln	140	145	150	155
Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr	160	165	170	175
Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser	180	185	190	195
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp	200	205	210	215
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr	220	225	230	235

			180					185					190				
Ser	Arg	Glu	Glu	Glu	Leu	Leu	Arg	Glu	Arg	Lys	Arg	Leu	Gly	Val	Phe		
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Gly	Ile	Thr	Ser	Tyr	Asp	Phe	His	Ser	Glu	Ser	Gly	Leu	Phe	Leu	Phe		
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Gln	Ala	Ser	Asn	Ser	Leu	Phe	His	Cys	Arg	Asp	Gly	Gly	Lys	Asn	Gly		
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Phe	Met	Val	Ser	Pro	Gly	Pro	Gly	Cys	Val	Ser	Pro	Met	Lys	Pro	Leu		
				245					250					255			
Glu	Ile	Lys	Thr	Gln	Cys	Ser	Gly	Pro	Arg	Met	Asp	Pro	Lys	Ile	Cys		
		260						265					270				
Pro	Ala	Asp	Pro	Ala	Phe	Phe	Ser	Phe	Ile	Asn	Asn	Ser	Asp	Leu	Trp		
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Val	Ala	Asn	Ile	Glu	Thr	Gly	Glu	Glu	Arg	Arg	Leu	Thr	Phe	Cys	His		
	290					295					300						
Gln	Gly	Leu	Ser	Asn	Val	Leu	Asp	Asp	Pro	Lys	Ser	Ala	Gly	Val	Ala		
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Thr	Phe	Val	Ile	Gln	Glu	Glu	Phe	Asp	Arg	Phe	Thr	Gly	Tyr	Trp	Trp		
				325					330					335			
Cys	Pro	Thr	Ala	Ser	Trp	Glu	Gly	Ser	Glu	Gly	Leu	Lys	Thr	Leu	Arg		
		340					345					350					
Ile	Leu	Tyr	Glu	Glu	Val	Asp	Glu	Ser	Glu	Val	Glu	Val	Ile	His	Val		
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Pro	Ser	Pro	Ala	Leu	Glu	Glu	Arg	Lys	Thr	Asp	Ser	Tyr	Arg	Tyr	Pro		
	370				375						380						
Arg	Thr	Gly	Ser	Lys	Asn	Pro	Lys	Ile	Ala	Leu	Lys	Leu	Ala	Glu	Phe		
385					390					395					400		
Gln	Thr	Asp	Ser	Gln	Gly	Lys	Ile	Val	Ser	Thr	Gln	Glu	Lys	Glu	Leu		
				405					410				415				
Val	Gln	Pro	Phe	Ser	Ser	Leu	Phe	Pro	Lys	Val	Glu	Tyr	Ile	Ala	Arg		
		420						425					430				
Ala	Gly	Trp	Thr	Arg	Asp	Gly	Lys	Tyr	Ala	Trp	Ala	Met	Phe	Leu	Asp		
	435					440						445					
Arg	Pro	Gln	Gln	Trp	Leu	Gln	Leu	Val	Leu	Leu	Pro	Pro	Ala	Leu	Phe		
	450				455						460						
Ile	Pro	Ser	Thr	Glu	Asn	Glu	Glu	Gln	Arg	Leu	Ala	Ser	Ala	Arg	Ala		
465					470					475					480		
Val	Pro	Arg	Asn	Val	Gln	Pro	Tyr	Val	Val	Tyr	Glu	Glu	Val	Thr	Asn		
			485					490					495				
Val	Trp	Ile	Asn	Val	His	Asp	Ile	Phe	Tyr	Pro	Phe	Pro	Gln	Ser	Glu		
		500					505						510				
Gly	Glu	Asp	Glu	Leu	Cys	Phe	Leu	Arg	Ala	Asn	Glu	Cys	Lys	Thr	Gly		
	515					520						525					
Phe	Cys	His	Leu	Tyr	Lys	Val	Thr	Ala	Val	Leu	Lys	Ser	Gln	Gly	Tyr		
	530				535						540						
Asp	Trp	Ser	Glu	Pro	Phe	Ser	Pro	Gly	Glu	Asp	Glu	Phe	Lys	Cys	Pro		
545				550						555					560		
Ile	Lys	Glu	Glu	Ile	Ala	Leu	Thr	Ser	Gly	Glu	Trp	Glu	Val	Leu	Ala		
			565					570					575				
Arg	His	Gly	Ser	Lys	Ile	Trp	Val	Asn	Glu	Glu	Thr	Lys	Leu	Val	Tyr		
		580					585						590				
Phe	Gln	Gly	Thr	Lys	Asp	Thr	Pro	Leu	Glu	His	His	Leu	Tyr	Val	Val		
	595					600						605					
Ser	Tyr	Glu	Ala	Ala	Gly	Glu	Ile	Val	Arg	Leu	Thr	Thr	Pro	Gly	Phe		

610	615	620
Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His		
625	630	635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
	690	695
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		700
705	710	715
		720

&lt;210&gt; 2781

&lt;211&gt; 1268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2781

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1020

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 aattatattc aaaatgagcc aaagtgtctc gagaccttct atgacacatt agtgtcacat  
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 1268

<210> 2782

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
		35					40					45			
Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
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Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
65					70					75				80	
Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
				85					90					95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
			100					105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
		115					120					125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
	130					135					140				
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
145					150					155				160	
Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
				165					170					175	
Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
			180					185					190		
Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
	195					200					205				
Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
	210					215					220				
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
225					230					235				240	
Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
				245					250					255	
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
		260						265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg
	275					280						285			
Phe	Val	Glu	Asn	His	Val	Gly	Val	Ala	Val	Lys	Trp	Val	Gly	Val	Gly

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<210> 2783  
 <211> 2376  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gttgatgtag aagattatta cccagctttc ctggacatgg tgcggagcct gctggatggc  
 180  
 aacatagact catcacagta tgaagattca ctgagagaga tgttcaccat tcatgcctac  
 240  
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 300  
 agtgatgaga tctgtgtgca ggtgactgac ctttacctgg cagaaaataa taatggggcc  
 360  
 accggaggcc agctgaacac acagaactca aggagcctcc tggagtcaac gtatcagcgg  
 420  
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 480  
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 720  
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 1260  
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 1320

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 1380  
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 1440  
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 1500  
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 2280  
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 2340  
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 2376

&lt;210&gt; 2784

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
			20					25					30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
			35				40					45			
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
			50			55				60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65					70				75					80	
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

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180
ccggcggtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgcctg gctccaccgt
360
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 480  
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 492

<210> 2786  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 2786  
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 20 25 30  
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu  
 35 40 45  
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
 50 55 60  
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
 65 70 75 80  
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
 85 90 95  
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
 100 105 110  
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
 115 120 125  
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala  
 130 135 140  
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro  
 145 150 155

<210> 2787  
 <211> 299  
 <212> DNA  
 <213> Homo sapiens

<400> 2787  
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 atgtgggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgccc  
 120  
 acaatgcaca gacatggcag tatccttctg gtgggagggga gtcaccattt gctctgcctt  
 180  
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg  
 240  
 ggtattgatt ctgaagagat cactgatggc cgtgatttct tgcctcagct taccagat  
 299

<210> 2788  
 <211> 95  
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
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Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
           20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
 35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
 50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
 65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcagggtcca
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240
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tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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           20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ser Pro
           35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala				
65		70		75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg				80
		85		90
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys				95
		100		105
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly				110
		115		120
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg				125
		130		135
				140

&lt;210&gt; 2791

&lt;211&gt; 1271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aataccaga
300
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720
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960
agaaagccat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaat
1020
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1080

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gtaacagggga gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat  
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1260  
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1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50				55						60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85					90						95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
		100						105						110	
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
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<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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180  
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240  
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300  
attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact  
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420  
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480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct  
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 600  
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 660  
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 720  
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc  
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 840  
 cacgcgt  
 847

<210> 2794  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2794  
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 Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Ala Phe Thr Ile Arg  
 35 40 45  
 Arg Glu Asp Gly Gln Phe Gln Cys Ile Thr Gly Pro Ala Gln Val Pro  
 50 55 60  
 Met Met Ser Pro Asn Gly Ser Val Pro Pro Ile Tyr Val Pro Pro Gly  
 65 70 75 80  
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 85 90 95  
 Val Pro Gln Ala Pro Glu Phe His Pro Gly Ser His Thr Val Leu His  
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 Arg Ser Pro His Pro Pro Leu Pro Gly Phe Ile Pro Val Pro Thr Met  
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<210> 2795  
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&lt;210&gt; 2796

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;210&gt; 2797

&lt;211&gt; 475

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

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		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
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65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90						95	
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
			100					105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
		115					120					125			
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
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<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55			60							
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70				75					80		
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

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 Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val  
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 Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro  
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 Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr  
 225 230 235 240  
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 Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro  
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<210> 2801  
 <211> 549  
 <212> DNA  
 <213> Homo sapiens

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<210> 2802

<211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 2802

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		20					25					30			
Asn	Met	Glu	Ile	Cys	Asp	Ile	Ile	Asn	Glu	Thr	Glu	Glu	Gly	Pro	Lys
	35					40					45				
Asp	Ala	Ile	Arg	Ala	Leu	Lys	Lys	Arg	Leu	Asn	Gly	Asn	Arg	Asn	Tyr
	50					55				60					
Arg	Glu	Val	Met	Leu	Ala	Leu	Thr	Val	Leu	Glu	Thr	Cys	Val	Lys	Asn
65					70					75				80	
Cys	Gly	His	Arg	Phe	His	Ile	Leu	Val	Ala	Asn	Arg	Asp	Phe	Ile	Asp
		85							90					95	
Ser	Val	Leu	Val	Lys	Ile	Ile	Ser	Pro	Lys	Asn	Asn	Pro	Pro	Thr	Ile
		100						105					110		
Val	Gln	Asp	Lys	Val	Leu	Ala	Leu	Ile	Gln	Ala	Trp	Ala	Asp	Ala	Phe
		115					120					125			
Arg	Ser	Ser	Pro	Asp	Leu	Thr	Gly	Val	Val	His	Ile	Tyr	Glu	Glu	Leu
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 <212> DNA  
 <213> Homo sapiens

<400> 2803

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<210> 2804  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2804

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 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu  
 35 40 45  
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys  
 50 55 60  
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro  
 65 70 75 80  
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln  
 85 90 95  
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln  
 100 105 110  
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val  
 115 120 125  
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr  
 130 135 140  
 Ala Gln Pro Gly Leu Ala Gly Thr Gly  
 145 150

&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

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<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys  
 50 55 60  
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg  
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 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly  
 85 90 95  
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr  
 100 105 110  
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg  
 115 120 125  
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro  
 130 135 140  
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr  
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<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

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<210> 2808  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<400> 2808  
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 Leu Glu Leu Glu Ser Ser Gln Asp Ile Gln Asp Val Leu Asp Ala Asn  
 35 40 45  
 Lys Ser Leu Pro Glu Ser Ser Leu Thr Asp Leu Leu Ser Asp Asn Phe

50		55		60
Thr Asp Ser Leu Val	Ser Phe Ser Ala Glu Ile	Leu Ser Arg Thr Leu		
65	70	75	80	
Cys Glu Pro Leu Val	Ala Ser Leu Trp Met Lys	Leu Gly Asn Thr Gly		
	85	90	95	
Ala Met Arg Arg Cys Val	Lys Leu Thr Val Ala	Leu Glu Thr Ala Glu		
	100	105	110	
Cys Glu Phe Pro Pro His	Leu Asp Val Tyr Ile	Glu Asp Pro His Leu		
	115	120	125	
Pro Pro Ser Leu Gly Leu	Leu Pro Gly Ala Arg	Val His Phe Ser Gln		
	130	135	140	
Leu Glu Lys Arg Val Ser	Arg Ser His Asn Val	Tyr Cys Cys Phe Arg		
145	150	155	160	
Ser Ser Thr Tyr Val Gln	Val Leu Ser Phe Pro	Pro Glu Thr Thr Ile		
	165	170	175	
Ser Val Pro Leu Pro His	Ile Tyr Leu Ala Glu	Leu Leu Gln Gly Gly		
	180	185	190	
Gln Ser Pro Phe Gln Ala	Thr Ala Ser Cys His	Ile Val Ser Val Phe		
	195	200	205	
Ser Leu Gln Leu Phe Trp	Val Cys Ala Tyr Cys	Thr Ser Ile Cys Arg		
	210	215	220	
Gln Gly Lys Cys Thr Arg	Leu Gly Ser Thr Cys	Pro Thr Gln Thr Ala		
225	230	235	240	
Ile Ser Gln Ala Ile Ile	Arg Leu Leu Val Glu	Asp Gly Thr Ala Glu		
	245	250	255	
Ala Val Val Thr Cys Arg	Asn His His Val Ala	Ala Ala Leu Gly Leu		
	260	265	270	
Cys Pro Arg Glu Trp Ala	Ser Leu Asp Phe Val	Gln Val Pro Gly		
	275	280	285	
Arg Val Val Leu Gln Phe	Ala Gly Pro Gly Ala	Gln Leu Glu Ser Ser		
	290	295	300	
Ala Arg Val Asp Glu Pro	Met Thr Met Phe Leu	Trp Thr Leu Cys Thr		
305	310	315	320	
Ser Pro Ser Val Leu Arg	Pro Ile Val Leu Ser	Phe Glu Leu Glu Arg		
	325	330	335	
Lys Pro Ser Lys Ile Val	Pro Leu Glu Pro Pro	Arg Leu Gln Arg Phe		
	340	345	350	
Gln Cys Gly Glu Leu Pro	Phe Leu Thr His Val	Asn Pro Arg Leu Arg		
	355	360	365	
Leu Ser Cys Leu Ser Ile	Arg Glu Ser Glu Tyr	Ser Ser Ser Leu Gly		
	370	375	380	
Ile Leu Ala Ser Ser Cys				
385	390			

&lt;210&gt; 2809

&lt;211&gt; 1502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

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aa  
1502

&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg  
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 20 25 30  
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys  
 35 40 45  
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
 50 55 60  
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
 65 70 75 80  
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly  
 85 90 95  
 Phe Gly Thr Arg Trp Phe  
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&lt;210&gt; 2811

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2811

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&lt;210&gt; 2812

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln  
 1 5 10 15  
 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys  
 20 25 30  
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35 40 45  
 Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu  
 50 55 60  
 Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro  
 65 70 75 80  
 Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala  
 85 90 95  
 Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His  
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 Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln  
 115 120 125  
 Leu Gly Ser  
 130

<210> 2813  
 <211> 2417  
 <212> DNA  
 <213> Homo sapiens

<400> 2813  
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2417

&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 2814  
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 Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg  
 35 40 45  
 Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu  
 50 55 60  
 Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln  
 65 70 75 80  
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys  
 85 90 95  
 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu  
 100 105 110  
 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr  
 115 120 125  
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg  
 130 135 140  
 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile  
 145 150 155 160  
 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu  
 165 170 175  
 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln  
 180 185 190  
 Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala  
 195 200 205  
 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln  
 210 215 220  
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn  
 225 230 235 240  
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro  
 245 250 255  
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu  
 260 265 270  
 Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn  
 275 280 285  
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val  
 290 295 300  
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly  
 305 310 315 320  
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala  
 325 330 335  
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly  
 340 345 350  
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala  
 355 360 365  
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly  
 370 375 380  
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala  
 385 390 395 400  
 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser  
 405 410 415  
 Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

	420		425		430										
Val	Ser	His	Asp	Cys	Thr	Phe	Val	Gly	Arg	Lys	Val	Ile	His	Thr	Cys
	435						440					445			
Ile	Thr	Trp	Ser	Leu	Asp	Ala	Glu	Val	Pro	Ile	His	His	Thr	Cys	Pro
	450					455					460				
Ile	Ala	Pro	Thr	Leu	Leu	Tyr									
465						470									

&lt;210&gt; 2815

&lt;211&gt; 1421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2815

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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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 20 25 30  
 Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val  
 35 40 45  
 Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr  
 50 55 60  
 Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala  
 65 70 75 80  
 Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser  
 85 90 95  
 Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg  
 100 105 110  
 Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly  
 115 120 125  
 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg  
 130 135 140  
 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp  
 145 150 155 160  
 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys  
 165 170 175  
 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val  
 180 185 190  
 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp  
 195 200 205  
 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu  
 210 215 220  
 Ala Ser Gln Ala Gly Ala Trp Ala Pro Gly Pro Arg Gln Pro Pro Gly  
 225 230 235 240  
 Ala Leu Leu Pro Ala Ala Arg Pro His Arg Leu Pro Glu Arg Ala Asp  
 245 250 255  
 Phe Leu Pro Gly Gly Ala Ala Gly Val Leu Leu Leu Gln Glu Arg Leu  
 260 265 270  
 Xaa Asp Cys Pro Ala Pro Gln Ala Gly Leu Ser Pro Ser Arg Arg Pro  
 275 280 285  
 Ala Ala Pro Met Pro Leu Pro Asn Met Leu Gly Val Gln Lys Pro Pro  
 290 295 300  
 Arg Gly Asp

305

<210> 2817  
 <211> 219  
 <212> DNA  
 <213> Homo sapiens

<400> 2817  
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<210> 2818  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 2818  
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 20 25 30  
 Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His  
 35 40 45  
 Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His  
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 Gln His Thr Phe Ala Pro Phe Thr Arg  
 65 70

<210> 2819  
 <211> 730  
 <212> DNA  
 <213> Homo sapiens

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<210> 2820  
<211> 195  
<212> PRT  
<213> Homo sapiens

<400> 2820  
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Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser  
35 40 45  
Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser  
50 55 60  
Val Gly Arg Glu Ala His Ala Gln Gln Pro Leu Leu Pro Asp Val Ile  
65 70 75 80  
Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met Phe Thr  
85 90 95  
Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe Ser Leu Asn  
100 105 110  
Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His Ile Met Lys Asn  
115 120 125  
Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val Gly Asp Arg Ser Ile  
130 135 140  
Met Gln Ser Gln Ser Leu Met Leu Glu Leu Arg Glu Gln Asp Gln Val  
145 150 155 160  
Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu Asn Ala Ile Phe Ser Glu  
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<210> 2821  
<211> 1746  
<212> DNA  
<213> Homo sapiens

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420  
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1740

cctagg

1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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      20           25           30
Leu Ser Asn Ile Ile Asn Lys Leu Leu Glu Thr Lys Asn Glu Leu His
      35           40           45
Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met
      50           55           60
Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val
65           70           75           80
Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
      85           90           95
Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
      100          105          110
Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu
      115          120          125
Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
      130          135          140
Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu
145          150          155          160
Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu
      165          170          175
Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser
      180          185          190
Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly
      195          200          205
Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu
      210          215          220
Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys
225          230          235          240
Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly
      245          250          255
His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile
      260          265          270
Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser
      275          280          285
Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile
      290          295          300
Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg
305          310          315          320
His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser
      325          330          335
Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser

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          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
          420

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&lt;210&gt; 2823

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2823

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461

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&lt;210&gt; 2824

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2824

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Met Cys Val Ser Pro Ser Ser Pro Cys Pro Arg Gly Phe Ala Trp Leu
1          5          10          15
Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825  
<211> 1520  
<212> DNA  
<213> Homo sapiens

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180  
gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca  
240  
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300  
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360  
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420  
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720  
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780  
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<210> 2826  
 <211> 506  
 <212> PRT  
 <213> Homo sapiens

<400> 2826  
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 20 25 30  
 Thr Ala Leu Met Glu Ala Cys Met Asp Gly His Val Glu Val Ala Arg  
 35 40 45  
 Leu Leu Leu Asp Ser Gly Ala Gln Val Asn Met Pro Ala Asp Ser Phe  
 50 55 60  
 Glu Ser Pro Leu Thr Leu Ala Ala Cys Gly Gly His Val Glu Leu Ala  
 65 70 75 80  
 Ala Leu Leu Ile Glu Arg Gly Ala Asn Leu Glu Glu Val Asn Asp Glu  
 85 90 95  
 Gly Tyr Thr Pro Leu Met Glu Ala Ala Arg Glu Gly His Glu Glu Met  
 100 105 110  
 Val Ala Leu Leu Ser Thr Arg Ser Xaa Ile Ser Met His Arg Gln  
 115 120 125  
 Lys Lys Leu Lys Lys Leu Leu Thr Leu Ala Cys Cys Gly Gly Phe  
 130 135 140  
 Leu Glu Val Ala Asp Phe Leu Ile Lys Ala Gly Ala Asp Ile Glu Leu  
 145 150 155 160  
 Gly Cys Ser Thr Pro Leu Met Glu Ala Ala Gln Glu Gly His Leu Glu  
 165 170 175  
 Leu Val Lys Tyr Leu Leu Ala Ala Gly Ala Asn Val His Ala Thr Thr  
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 Ala Thr Gly Asp Thr Ala Leu Thr Tyr Ala Cys Glu Asn Gly His Thr  
 195 200 205  
 Asp Val Ala Asp Val Leu Leu Gln Ala Gly Ala Asp Leu Asp Lys Gln  
 210 215 220  
 Glu Asp Met Lys Thr Ile Leu Glu Gly Ile Asp Pro Ala Lys His Leu  
 225 230 235 240  
 Glu His Glu Ser Glu Gly Gly Arg Thr Pro Leu Met Lys Ala Ala Arg  
 245 250 255  
 Ala Gly His Val Cys Thr Val Gln Phe Leu Ile Ser Lys Gly Ala Asn  
 260 265 270  
 Val Asn Arg Thr Thr Ala Asn Asn Asp His Thr Val Leu Ser Leu Ala  
 275 280 285  
 Cys Ala Gly Gly His Leu Ala Val Val Glu Leu Leu Leu Ala His Gly  
 290 295 300  
 Ala Asp Pro Thr His Arg Leu Lys Asp Gly Ser Thr Met Leu Ile Glu  
 305 310 315 320  
 Ala Ala Lys Gly Gly His Thr Ser Val Val Cys Tyr Leu Leu Asp Tyr  
 325 330 335  
 Pro Asn Asn Leu Leu Ser Ala Pro Pro Pro Asp Val Thr Gln Leu Thr

340 345 350  
 Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala  
 355 360 365  
 Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn  
 370 375 380  
 Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys  
 385 390 395 400  
 Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile  
 405 410 415  
 Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu  
 420 425 430  
 Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln  
 435 440 445  
 Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys  
 450 455 460  
 Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln  
 465 470 475 480  
 Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys  
 485 490 495  
 Thr Gln Gln Gln Leu Lys Lys Gln Tyr Leu  
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&lt;210&gt; 2827

&lt;211&gt; 481

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2827

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 481

&lt;210&gt; 2828

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2828

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Gly Ser Arg Ala Leu Pro Phe Leu Gly Gly Asn Arg Leu Ser Leu Asp			
	20	25	30
Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
	65	70	75
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
	130	135	140
Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala			
	145	150	155
			160

&lt;210&gt; 2829

&lt;211&gt; 3648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

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900

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 3648

&lt;210&gt; 2830

&lt;211&gt; 668

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2830

Met	Val	Met	Glu	Phe	Pro	Asp	Asn	Val	Leu	Asn	Leu	Asp	Gly	His	Gln
1				5					10					15	
Asn	Asn	Gly	Ala	Gln	Leu	Lys	Gln	Phe	Ile	Gln	Arg	His	Gly	Met	Leu
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Lys	Gln	Gln	Asp	Leu	Ser	Ile	Ala	Met	Val	Val	Thr	Ser	Arg	Glu	Val
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Leu	Ser	Ala	Leu	Ser	Gln	Leu	Val	Pro	Cys	Val	Gly	Cys	Arg	Arg	Ser
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2064

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<210> 2831
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<212> DNA
<213> Homo sapiens
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780

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<210> 2832  
 <211> 611  
 <212> PRT  
 <213> Homo sapiens

<400> 2832

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Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
          35          40          45
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
          50          55          60
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
65          70          75          80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
          85          90          95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
          100          105          110
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
          115          120          125
Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
          130          135          140
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
145          150          155          160
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
          165          170          175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
          180          185          190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
          195          200          205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
          210          215          220
Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
225          230          235          240
Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
          245          250          255
Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
          260          265          270
Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
          275          280          285
Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val
          290          295          300
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
305          310          315          320
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
          325          330          335
Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
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Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
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Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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370		375		380
Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys				
385		390		395
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu				400
	405		410	415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg				
	420		425	430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg				
	435		440	445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile				
	450		455	460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val				
465		470		475
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp				480
	485		490	495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val				
	500		505	510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp				
	515		520	525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys				
	530		535	540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr				
545		550		555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile				560
	565		570	575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu				
	580		585	590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala				
	595		600	605
Pro Glu Met				
610				

&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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&lt;210&gt; 2834

<211> 117  
 <212> PRT  
 <213> Homo sapiens

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 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu  
 35 40 45  
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser  
 50 55 60  
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr  
 65 70 75 80  
 Lys Cys Leu Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu  
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 Leu Gly Met Cys Ala  
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<210> 2835  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

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 300  
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<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

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			20					25					30		
Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
		35					40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
	50					55					60				
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70					75				80	
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
			85						90					95	
Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
			100					105					110		
Glu	Glu	Asn	Arg	Asp	Lys	Leu	Asp	His	Cys	Leu	Gln	Glu	Ala	Ser	Pro
		115					120					125			
Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
	130					135					140				
Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
145					150					155				160	
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Leu Gly

<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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&lt;210&gt; 2838

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2838

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			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50			55					60					
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65					70				75						80
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
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Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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<210> 2839
<211> 606
<212> DNA
<213> Homo sapiens
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2073

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 606

<210> 2840  
 <211> 202  
 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His  
 35 40 45  
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu  
 50 55 60  
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe  
 65 70 75 80  
 Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile  
 85 90 95  
 Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val  
 100 105 110  
 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr  
 115 120 125  
 Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu  
 130 135 140  
 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr  
 145 150 155 160  
 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His  
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 Asp Phe Ser Asp Met Gln Met Leu Asp Gly  
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 <212> DNA  
 <213> Homo sapiens

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 120  
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 180

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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
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Cys	Lys	Ser	Glu	Pro	Pro	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr	
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Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
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Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu				
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Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu				
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Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val				
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Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His				
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465		470		475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile				
	485		490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro				
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&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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<210> 2844

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<212> PRT

<213> Homo sapiens

<400> 2844

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Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
 65           70           75           80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
 85           90           95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
 100          105          110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
 115          120          125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
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Gln Ala Ser Thr Pro
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<210> 2845

<211> 934

<212> DNA

<213> Homo sapiens

<400> 2845

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 Ala Ala Ser Ser Thr Gln Val Ala Leu Asp Thr Asp Cys Thr Gln Gly  
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&lt;210&gt; 2848

&lt;211&gt; 856

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

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Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
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Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
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Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

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Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
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Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Gln	Pro	Ile	Ser	
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Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
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360
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420
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480
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660
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720
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780
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900

```

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 960  
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 1020  
 cctcttcctt ctgtccctcc gactacaacc aacagcagcc gagggacgaa cagcacctta  
 1080  
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 1200  
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 1260  
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 1320  
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 1380  
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 1440  
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

Leu	Thr	Thr	Ser	Pro	Asn	Phe	Met	Val	Leu	Ile	Ala	Thr	Ser	Val	Glu
1				5				10						15	
Thr	Ser	Ala	Ala	Ser	Gly	Ser	Pro	Glu	Gly	Ala	Arg	Met	Thr	Thr	Val
		20						25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
		35					40					45			
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50					55					60				
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65					70					75					80
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
				85					90					95	
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
			100					105					110		
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115					120					125			
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130					135					140				
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
145					150					155				160	
Thr	Glu	Ile	Glu	Thr	Thr	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Ser	Asp	Thr

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<210> 2857
<211> 1668
<212> DNA
<213> Homo sapiens
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2095

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 600  
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatggtgg  
 660  
 aaatgatgct actaccagac tgetgctaca gogatgatgg gccaccaca gaggggaattg  
 720  
 atctaaatga tcctgcgatt aagcaagatg cattattatt agaaagatgg atcttggagc  
 780  
 cagttcctcg acagaatggg gaccgattta ttgaagagaa gacgcttctg ttggctgtcc  
 840  
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctattc  
 900  
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 960  
 agactccaat tgagcatgtg tttcctgttc ccaatgtttc tcacaatgtt gccttgaaag  
 1020  
 tcagtgggtca atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac  
 1080  
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcatcagcac  
 1140  
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 1200  
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 1260  
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 1320  
 gggacatctc aagccaatat tctaggcttt agtgggtatag gtgatataaa atcacaagaa  
 1380  
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 1440  
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 1500  
 caagaaatca ttgcaagaat tgctcaacat ttgattcatt gtgatccaag cacttcacat  
 1560  
 gtttctggac gtccatttaa tactcaagag tctagttcac tccattcaaa acttttccgg  
 1620  
 gtttcacaag aaaatgagaa cgtggggaaa aggtaaagaa gctttctc  
 1668

&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

Met	Lys	Pro	Asp	Arg	Asp	Thr	Leu	Asp	Glu	Tyr	Phe	Glu	Tyr	Asp	Ala
1				5				10						15	
Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25						30	
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35				40						45			
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50		55		60											
Leu	Ala	Gln	Cys	Arg	Gln	Ala	Arg	Arg	Thr	Arg	Ser	Glu	Val	Thr	Leu
65		70		75		80									
Leu	Trp	Lys	Asn	Asn	Leu	Pro	Ile	Met	Val	Glu	Met	Met	Leu	Leu	Pro
		85		90		95									
Asp	Cys	Cys	Tyr	Ser	Asp	Asp	Gly	Pro	Thr	Thr	Glu	Gly	Ile	Asp	Leu
		100		105		110									
Asn	Asp	Pro	Ala	Ile	Lys	Gln	Asp	Ala	Leu	Leu	Leu	Glu	Arg	Trp	Ile
		115		120		125									
Leu	Glu	Pro	Val	Pro	Arg	Gln	Asn	Gly	Asp	Arg	Phe	Ile	Glu	Glu	Lys
		130		135		140									
Thr	Leu	Leu	Leu	Ala	Val	Arg	Ser	Phe	Val	Phe	Phe	Ser	Gln	Leu	Ser
145		150		155		160									
Ala	Trp	Leu	Ser	Val	Ser	His	Gly	Ala	Ile	Pro	Arg	Asn	Ile	Leu	Tyr
		165		170		175									
Arg	Ile	Ser	Ala	Ala	Asp	Val	Asp	Leu	Gln	Trp	Asn	Phe	Ser	Gln	Thr
		180		185		190									
Pro	Ile	Glu	His	Val	Phe	Pro	Val	Pro	Asn	Val	Ser	His	Asn	Val	Ala
		195		200		205									
Leu	Lys	Val	Ser	Gly	Gln	Ser	Leu	Ala	Gln	Thr	Ile				
		210		215		220									

&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

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120
caccggcaa tgttccctcg aaggggcagc ggtagtggca gcgcctctgc tctcaatgca
180
gcaggtaccg gcgtcggtag taatgccaca tcttcgagg attttccgcc tccgtcgctg
240
cttcagccgc cgccccctgc agcatcttct acgtcgggac cacagcctcc gcctccacaa
300
agcctgaacc tcctttcgca ggctcagctg caggcacagc ctcttgcgcc aggcggaact
360
caaatgaaaa agaaaagtgg cttccagata actagcgta ctcctgctca gatctccgct
420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
tctcacacgg aagatctctc ttcttcggag atccttgatg tgtcactttc cagggctact
540
gacttagggg agcccgaacg cagctcctca gaagagaccc taaataactt ccaggaagcc
600
gagacacctg gggcagttct tcccaaccag cccaccttc ctcagcctca tttgcctcac
660
cttcacacac agaattgtgt gatcaatggg aatgctcatc cacaccacct ccatcaccac
720
catcagattc atcatgggca ccacctccaa catggtcacc accatccatc tcatgttgct
780

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<210> 2860
<211> 343
<212> PRT
<213> Homo sapiens
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2098

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Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

```

<210> 2861  
 <211> 756  
 <212> DNA  
 <213> Homo sapiens

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<400> 2861
gctagctcta gctctgcacc agcccaagaa accatctgcc tgcacgactc actagatgaa
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gacctttctt tccattcacc ttcactggat cttgtttctg aagcttttagc gggtatcaac
120
aatgggaaca agggccctcc agttgggtca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag attctactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ccttattgct
360
ggttctttcca ttcagaacct taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agaggtcaag ccagattcac acttcttctt cttcacagac ccatgtctcc
480
tcttcttccc aagcccaaat tgctgcctct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgtaaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccgt cgtgaagtta
660
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720
atgtaccgcc ttcccttatt taccctcttc acgcgt
756

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<210> 2862  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

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<400> 2862
Ala Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp
1          5          10          15
Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20          25          30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35          40          45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

```

```

      50              55              60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro
65              70              75              80
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala
      85              90              95
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr
      100              105              110
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys
      115              120              125
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln
      130              135              140
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser
145              150              155              160
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr
      165              170              175
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His
      180              185              190
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr
      195              200              205
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro
      210              215              220
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu
225              230              235              240
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg
      245              250

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&lt;210&gt; 2863

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

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gcgccgagcg gtggcgctcg tgctgcccc tctcgtcgg gaagaatcgt ttggtctcct
120
gccgtgcccc gaatcccagt cagaagttcc agcctgccac tggtctctga tgccatgcc
180
gcaccaactc aactgttttt tctctcctc cgtaactgtg aactgagcag gatctatggc
240
actgcatgtt actgccacca caaacatctc tgttggtcct catcgtacat tctcagagt
300
cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg
360
tggcagtaca cccaaggaag gagatatgct tccacaccac agaaatttta cctcacacct
420
ccacaagtca atagcatcct taaagctaata gaatacagtt tcaaagtgcc agaatttgac
480
ggcaaaaatg tcagttctat ccttggattt gacagcaatc agctgcctgc aaatgcaccc
540
attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttgggggtt
600
tttgatggcc atgcagggtg tgcttggtcc caggcagtca gtgaaagact cttttattat
660

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attgctgtct ctttggtacc ccatgagact ttgctagaga ttgaaaatgc a  
711

<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

Xaa	Arg	Arg	Arg	Ile	Ser	Met	Gln	Arg	Ala	Pro	Gly	Ala	Ala	Arg	Xaa
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Cys	Val	Glu	Arg	Ala	Pro	Ser	Gly	Gly	Val	Val	Val	Ala	Pro	Ser	Ser
		20						25					30		
Ser	Gly	Arg	Ile	Val	Trp	Ser	Pro	Ala	Val	Pro	Gly	Ile	Pro	Val	Arg
		35					40					45			
Ser	Ser	Ser	Leu	Pro	Leu	Phe	Ser	Asp	Ala	Met	Pro	Ala	Pro	Thr	Gln
		50				55					60				
Leu	Phe	Phe	Pro	Leu	Ile	Arg	Asn	Cys	Glu	Leu	Ser	Arg	Ile	Tyr	Gly
65					70					75				80	
Thr	Ala	Cys	Tyr	Cys	His	His	Lys	His	Leu	Cys	Cys	Ser	Ser	Ser	Tyr
				85					90					95	
Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
			100					105					110		
Phe	Cys	Arg	Pro	Lys	Glu	Asn	Trp	Trp	Gln	Tyr	Thr	Gln	Gly	Arg	Arg
		115					120					125			
Tyr	Ala	Ser	Thr	Pro	Gln	Lys	Phe	Tyr	Leu	Thr	Pro	Pro	Gln	Val	Asn
	130					135					140				
Ser	Ile	Leu	Lys	Ala	Asn	Glu	Tyr	Ser	Phe	Lys	Val	Pro	Glu	Phe	Asp
145					150					155					160
Gly	Lys	Asn	Val	Ser	Ser	Ile	Leu	Gly	Phe	Asp	Ser	Asn	Gln	Leu	Pro
				165					170				175		
Ala	Asn	Ala	Pro	Ile	Glu	Asp	Arg	Arg	Ser	Ala	Ala	Thr	Cys	Leu	Gln
			180					185					190		
Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
		195					200					205			
Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
	210					215					220				
Leu	Leu	Pro	His	Glu	Thr	Leu	Leu	Glu	Ile	Glu	Asn	Ala			
225					230					235					

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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agaagtagta gaagacaaag acagttcttt aaattcttga gaagtatgag ctctgtgtat  
120  
ctgcagtgtgta aagttttgat atgtgatagc agtgaccacc agtctcgctg caatcaaggt  
180  
tgtgtctcca gaagcaaacg agacatttct tcatataaat ggaaaacaga ttccatcata  
240

ggacccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa  
 300  
 acacatgcgg aagaaactcc aaaccagcct ttcaacagtg tgcattctgtt ttccttcatg  
 360  
 gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaataca  
 420  
 cgggcagact acaaatacca gaagctgcag aactattaac taacaggtcc aaccctaagt  
 480  
 gagacatggt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa  
 540  
 taaatgagga agggcctgaa agtggcacac aggcctgcaa aaaaa  
 585

<210> 2866  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2866  
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 Ser Met Ser Ser Val Tyr Leu Gln Cys Lys Val Leu Ile Cys Asp Ser  
 20 25 30  
 Ser Asp His Gln Ser Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys  
 35 40 45  
 Arg Asp Ile Ser Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro  
 50 55 60  
 Ile Arg Leu Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln  
 65 70 75 80  
 His Glu Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val  
 85 90 95  
 His Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala  
 100 105 110  
 Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys Tyr  
 115 120 125  
 Gln Lys Leu Gln Asn Tyr  
 130

<210> 2867  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 2867  
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 60  
 ctgtcggccg ccgccatcaa gaggatcgtg gctacagcta aggccagtgg gaagaagctg  
 120  
 cagaaggtga ctctgaaggt gtcgccacgg ggaattatcc ttcattcagg ccatcatcca  
 180  
 gctcccagac aacctgctg ccaactcaagg cttgtggccg cggcacctcg tccatgttgg  
 240  
 tgggtgttggc gctgaccgtg gacagcgggg ccttagccgt ctctctaag tccagcaggt  
 300

tcccagtggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcggggc cccaggacgt  
 360  
 cccctccctc ttggctggct ttgtccctct tctctttctc ttcccttggac acctgccaaa  
 420  
 actcaaaggc gactttgaag gcct  
 444

<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

Met	Leu	Phe	Ser	Leu	Lys	Tyr	Leu	Gly	Met	Thr	Leu	Val	Glu	Gln	Pro
1				5					10					15	
Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
			20					25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
		35					40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50					55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
65					70				75					80	
Trp	Cys	Trp	Arg												

<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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 cagcaatatg gaccaaacag ccagttcccc acccagccag gccagtaccc taccaccaac  
 120  
 cccccaaggc cactcacctc ccccaactac ccaggacaaa ggatgcccag ccaaccacagc  
 180  
 tccggacagt acccaccccc cacagtcaac atggggcagc attacaagcc agaacagttt  
 240  
 aatggacaaa ataacacggt ctcgggaagc agctacagta actacagcca agggaatgtc  
 300  
 aacaggcctc ccaggccggt tcctgtggca aattaccccc actcacctgt tccagggaac  
 360  
 cccacacccc ccattgacccc tgggagcagc atccctccat acctgtcccc cagccaagac  
 420  
 gtcaaaccac ccttcccgcc tgacatcaag ccaaatatga gcgctctgcc accaccccca  
 480  
 gccaaaccaca atgacgagct gcggctcaca ttccctgtgc gggatggcgt ggtgctggag  
 540  
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 600  
 gtctacaaga ccttgataat gaggcctgac ctggagctgc aattcaagtg ctaccaccac  
 660

gaggaccggc agatgaacac caactggccc gcctcgggtgc aggtcagcgt gaacgccacg  
720  
ccgctcacca tcgagcgagg cgacaacaag acctcccaca agcccctgca cctgaagcac  
780  
gtgtgccagc caggccgcaa caccatccag atcaccgta cggcctgctg ctgtctccac  
840  
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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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<210> 2871

<211> 786

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&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

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Phe Gly Glu Pro Tyr Ile Phe Glu Glu Leu Leu Gly Leu Lys Ile Arg
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Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
35     40     45
Leu Tyr Trp Thr Val Gly Glu Leu Thr Gly Val Asn Ser Asp Thr Ile
50     55     60
Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
65     70     75     80
Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
85     90     95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
100    105    110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
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<212> DNA  
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<210> 2874  
<211> 248  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
      35           40           45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
      50           55           60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
      65           70           75           80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
      85           90           95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
      100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
      115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
      130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
      145          150          155          160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
      165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
      180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
      195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
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Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro
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Leu Thr Pro Gly Ser His Tyr Ala
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&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
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Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
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Tyr

<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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&lt;210&gt; 2887

&lt;211&gt; 1945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2887

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 1945

&lt;210&gt; 2888

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

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		35				40						45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
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Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
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	130				135						140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145				150						155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
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Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln

<400> 2890  
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Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
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Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
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 <211> 565  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
 35 40 45  
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
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 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
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 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr  
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 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 2894

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

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Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
		35					40					45			
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
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Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
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Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
				85					90					95	
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
			100					105					110		
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
		115					120					125			
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
		130				135					140				
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
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Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
				165					170					175	
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
			180					185					190		
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
		195					200					205			
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
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Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
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Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met
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Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
			260					265					270		
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
		275					280					285			
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu
		290				295					300				
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
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Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
				325					330					335	
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
			340					345					350		
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu
		355					360					365			
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro
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Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385					390					395					400
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
				405					410					415	
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
			420					425					430		
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

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 Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp  
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 Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg  
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 <211> 697  
 <212> DNA  
 <213> Homo sapiens

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<210> 2896  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

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 Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala  
 35                      40                      45  
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 50                      55                      60  
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
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Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115					120					125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
	130					135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

Met	Asn	Val	Glu	Ile	Lys	Cys	Lys	Asp	Arg	Thr	Gly	Ser	Ile	Thr	Leu
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Leu	Thr	Pro	Asn	Gln	Thr	Asn	Ile	Ile	Asn	Phe	Tyr	Glu	Val	Glu	Leu
			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
		35					40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65					70					75				80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85						90					95	
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
		115					120					125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
	130					135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150						155					160
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165						170					175	
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200						205			
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr Leu	Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys Leu	Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Phe Ser Glu Glu	Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His	Pro Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Pro Leu	Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr	Ala Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile	Glu Met Val Thr Pro Val
640		

				645					650					655					
Arg	Gln	Val	Ala	Ser	Ala	Ser	Ile	Lys	Leu	Glu	Asn	Pro	Leu	Pro	Tyr				
			660					665					670						
Ser	Val	Thr	Phe	Ser	Thr	Glu	Cys	Arg	Met	Pro	Asp	Ile	Ala	Leu	Pro				
		675					680					685							
Ser	Gln	Phe	Val	Val	Pro	Ala	Asn	Ser	Glu	Gly	Thr	Phe	Ser	Phe	Glu				
		690				695					700								
Phe	Gln	Pro	Leu	Lys	Ala	Gly	Glu	Thr	Phe	Gly	Arg	Leu	Thr	Leu	His				
705					710					715					720				
Asn	Thr	Asp	Leu	Gly	Tyr	Tyr	Gln	Tyr	Glu	Leu	Tyr	Leu	Lys	Ala	Thr				
			725						730			735							
Pro	Ala	Leu	Pro	Glu	Lys	Pro	Val	His	Phe	Gln	Thr	Val	Leu	Gly	Ser				
		740					745					750							
Ser	Gln	Ile	Leu	Val	Lys	Phe	Ile	Asn	Tyr	Thr	Arg	Gln	Arg	Thr					
		755				760					765								
Glu	Tyr	Tyr	Cys	Arg	Thr	Asp	Cys	Thr	Asp	Phe	His	Ala	Glu	Lys	Leu				
		770				775					780								
Ile	Asn	Ala	Ala	Pro	Gly	Gly	Gln	Gly	Gly	Thr	Glu	Ala	Ser	Val	Glu				
785					790					795					800				
Val	Leu	Phe	Glu	Pro	Ser	His	Leu	Gly	Glu	Thr	Lys	Gly	Ile	Leu	Ile				
			805						810					815					
Leu	Ser	Ser	Leu	Ala	Gly	Gly	Glu	Tyr	Ile	Ile	Pro	Leu	Phe	Gly	Met				
			820					825					830						
Ala	Leu	Pro	Pro	Lys	Pro	Gln	Gly	Pro	Phe	Ser	Ile	Arg	Ala	Gly	Tyr				
		835					840					845							
Ser	Ile	Ile	Ile	Pro	Phe	Lys	Asn	Val	Phe	Tyr	His	Met	Val	Thr	Phe				
		850				855					860								
Ser	Ile	Ile	Val	Asp	Asn	Pro	Ala	Phe	Thr	Ile	Arg	Ala	Gly	Glu	Ser				
865					870					875					880				
Val	Arg	Pro	Lys	Lys	Ile	Asn	Asn	Ile	Thr	Val	Ser	Phe	Glu	Gly	Asn				
			885						890					895					
Pro	Ser	Gly	Ser	Lys	Thr	Pro	Ile	Thr	Thr	Lys	Leu	Thr	Val	Ser	Cys				
		900						905					910						
Pro	Pro	Gly	Glu	Gly	Ser	Glu	Thr	Gly	Val	Lys	Trp	Val	Tyr	Tyr	Leu				
		915					920						925						
Lys	Gly	Ile	Thr	Leu															
		930																	

&lt;210&gt; 2899

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2899

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60
gggtaccatg gacgtgggcg aacttctgag ctaccaggag ggtcattgcg aggagcagta
120
gagctgcact gccgaatgtc gtagccacta gccacatagg ctgttgattg cttgaaatgt
180
gactagtctg aattgagaaa tactcccaac aggggcacaa aacgtccccg ggatgatgag
240
gaagaagaac tgaagacacg ccgcaagcaa actggtactc gagaacgcgg ccgctatcgg
300

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 876

&lt;210&gt; 2900

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

Met	Thr	Val	Val	Glu	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
1				5					10					15	
Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
			20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg	Ser
		35					40					45			
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
	50					55					60				
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met	His
65					70					75				80	
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu	Asn
				85					90					95	
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp	Val
			100					105					110		
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp	Thr
		115					120					125			
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu	Val
	130					135					140				
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu	Asp
145					150					155				160	
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
				165					170					175	
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
			180						185						

&lt;210&gt; 2901

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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120  
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180  
aaagccaagc cctcgccccg gctcaccatc tttgacgagg aggtggaccc tgatgagggg  
240  
ctcttttgcc cgggcaggaa gctgtctcca caggaccctt cggaggacgt gtcattccatg  
300  
gacccccctga agctatttga tgatcctgac ctcggcgggg ccattccccct gggtgactcc  
360  
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420  
gcctccaagg aactgttcag gtaccacctg tccccagcgg cgcttgggca gctctgagag  
480  
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540  
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600  
gtgaaggggg ctgaggggga ggnaantcgc ccagggctgc tcagctagtt ccagaaagag  
660  
agaactttgt gtgcacaacc agtctttctt ttcacaatca tattttaaca gtttatgtaa  
720  
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756

&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

Thr	Arg	Arg	Arg	Gly	Ala	Phe	Asp	Phe	Phe	Glu	Lys	Gln	Asp	Gln	Val
1				5				10					15		
Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20				25					30			
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
	35					40					45				
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50				55					60					
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65				70					75					80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85				90						95		
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100				105						110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
	115					120						125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

130 135 140  
 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
 145 150 155

<210> 2903  
 <211> 542  
 <212> DNA  
 <213> Homo sapiens

<400> 2903  
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 120  
 gactcacaga acctcagtgc ctacaacacc cggctcttca aagaggtcga tggagaaggg  
 180  
 aagccctact acgagggtgcg gctggcttct gtgcttggtt cagagccttc cctggactct  
 240  
 gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgacccgg  
 300  
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat  
 360  
 gcagccaaca gccaccaggg gcagatgctg gccaggtata tagagagctt caccagggc  
 420  
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 480  
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 540  
 gt  
 542

<210> 2904  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2904  
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 20 25 30  
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35 40 45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50 55 60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65 70 75 80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85 90 95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100 105 110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115 120 125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130 135 140  
 His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg  
 145 150 155 160  
 Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala  
 165 170 175  
 Pro Pro Ser Arg  
 180

<210> 2905  
 <211> 814  
 <212> DNA  
 <213> Homo sapiens

<400> 2905  
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 120  
 ggattcctcc tctgcccagg tttctgctgt cccccaaaa gaaagacatg tagctgggca  
 180  
 tgggtgtaca catctgtggt ccagttact caggaggctg aggaggagg attgcttgag  
 240  
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 300  
 agagcaagac ccggccctc ttctcgactt tctatccctc ctctcaaca ccttttctt  
 360  
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 720  
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 780  
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<210> 2906  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 2906  
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 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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      35              40              45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50              55              60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65              70              75              80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85              90              95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100              105              110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115              120              125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130              135              140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
      145              150              155              160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165              170              175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
      180              185              190
Leu Leu Asp Val Lys Gly Pro Leu
      195              200

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&lt;210&gt; 2907

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

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  120
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  180
caaaggcaaa ggaattcttc ccttaatggt ggacgggtcct gagactgctc caccctgggc
  240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
  300
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  360
cctggccgat gccaccggt
  379

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&lt;210&gt; 2908

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

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Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
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Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20              25              30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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<210> 2909
<211> 2420
<212> DNA
<213> Homo sapiens
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2139

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1200  
aatagtgaga gagaaaatcc caaacatttg agacagggtt caaaagcacc cagacgcctt  
1260  
ctgtctcttt cccagttccc atctggctag ggactgtgaa tcagaattca gaatctgtgc  
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1380  
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1680  
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1920  
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1980  
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2100  
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2160  
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2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

```

      1           5           10           15
Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu Leu His Arg
      20           25           30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
      65           70           75           80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85           90           95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100          105          110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
      115          120          125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
      130          135          140
Cys Leu Gly Leu Ile Gly Arg Leu Val
      145          150

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&lt;210&gt; 2911

&lt;211&gt; 1327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

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720
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780
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840

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 960  
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 1080  
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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

Met	Ser	Glu	Val	Lys	Ser	Arg	Lys	Lys	Ser	Gly	Pro	Lys	Gly	Ala	Pro
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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
			35				40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
			50			55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70					75					80
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
				85					90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
			115				120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
			130			135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150					155					160
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180					185					190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
			195				200					205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210						215					220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

```

225          230          235          240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
          245          250          255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
          260          265          270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
          275          280          285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
          290          295          300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305          310          315          320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
          325          330          335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
          340          345          350

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<210> 2913  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

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120
cggcgcatgg acgtcttcac tgaggctgag ttgagggtga agtttcttca ggcccagat
180
gcttggtctcc ggtccatcct gactgccatt cctaataatg atccctatct ccatattaca
240
aaaaccatcg agggcctccc gtgtccatct ctttgatatc atcaccagat accggggccat
300
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360
g
361

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<210> 2914  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

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<400> 2914
Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr
1          5          10          15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
          20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
          35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
          50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

```

	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
	100							105					110		

&lt;210&gt; 2915

&lt;211&gt; 1782

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2915

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 120  
 tcagctgccg atagagaaat atacttactt agaacttccc ttcacgcaga aagagaacaa  
 180  
 gcgcaacaac ttcacaaact tcttgcatcg aaagaacagg aacacaggaa ggaacttgaa  
 240  
 acaagggagt tttttactga tgctgacttc caggatgcct tagctaaaga aatagccaaa  
 300  
 gaagagaaaa agcatgagca aatgataaaa gaataccaag agaaaattga cgtgttaagc  
 360  
 cagcagtata tggattttaga aaatgaattc cgtattgctt taactgttga agccagaaga  
 420  
 tttcaagatg ttaaagatgg ttttgaaaat gttgcaactg agttagcaaa gagcaaacat  
 480  
 gctcttattt gggctcaacg aaaagaaaat gagtcttcct ctttaattaa agatctgacc  
 540  
 tgtatggtaa aggaacaaaa aacaaaactg gcagaagttt ctaaattgaa acaagaaaca  
 600  
 gcagcaaat tacagaatca aatcaacacc cttgaaattt taattgaaga tgacaagcag  
 660  
 aagagtattc aaatagaact tctcaagcac gaaaaagtcc agcttatttc tgagctagca  
 720  
 gccaaaggaat cactaatatt tggtttaagg acagaaagaa aagtatgggg acatgagctg  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
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 1260  
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 1320

catagtatgg atgatgcctt taaaagacaa gttgatgcaa ttgttgaagc tcatcaagct  
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 1620  
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 1680  
 aatatatttt taaagacttt tgatcaagta tttattaatt gtataggttt tttataataa  
 1740  
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 1782

<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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Lys	Met	Glu	Arg	Gln	Lys	Arg	Gln	Gln	Gln	Ala	Ala	Gln	Ile	Arg	Leu
			20					25					30		
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
		35					40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50					55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65					70					75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85						90					95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
			100					105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
		115					120					125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
145					150					155					160
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165						170					175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180						185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
		195					200					205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
	210					215					220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
225				230						235					240
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
			245						250					255	
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly

```

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420

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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Gln	Lys	Thr	Tyr	Asn	Glu	Ala	Leu	Ala	Arg	Val	Gln	Arg	Xaa	Val	Gln
			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
		50					55				60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65					70					75					80
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
				85					90					95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
		130				135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145					150					155					160
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
				165					170					175	
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
			180					185					190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
		195					200					205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

210		215		220
Asn Thr Asn Leu Val	Gln Glu Asn Phe Ser Ser	Leu Leu Thr Leu Leu		
225	230	235	240	
Trp Thr His Thr Leu	Thr Val Leu Val Glu Ala Ala Ala	Ser Gln Arg		
	245	250	255	
Ser Ser Ser Leu Ala	Ser Asn Arg Leu Lys Ile Ala Leu	Gln Asn Leu		
	260	265	270	
Glu Ile Cys Phe His	Ala Glu Gly Cys Gly Leu Pro Pro	Lys Ala Leu		
	275	280	285	
His Thr Ala Thr Phe	Gln Ala Leu Gln Arg Asp Leu Glu Leu	Gln Ala		
	290	295	300	
Ala Ser Ser Arg Glu	Leu Ile Arg Lys Tyr Phe Cys Ser Arg	Ile Gln		
305	310	315	320	
Gln Gln Ala Glu Thr	Ser Glu Glu Leu Gly Ala Val Thr Val	Lys		
	325	330	335	
Ala Ser Tyr Arg Ala	Ser Glu Gln Lys Leu Arg Val Glu Leu Leu	Ser		
	340	345	350	
Ala Ser Ser Leu Leu	Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro	Phe		
	355	360	365	
Val Gln Leu Thr Leu	Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala			
	370	375	380	
Arg Glu Thr Gln Lys	His Lys Lys Asp Leu His Pro Leu Phe Asp Glu			
385	390	395	400	
Thr Phe Glu Phe Leu	Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala			
	405	410	415	
Cys Leu Leu Leu Thr	Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp			
	420	425	430	
Leu Glu Gly Glu Ala	Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser			
	435	440	445	
Gly Ser Glu Glu Pro	Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr			
	450	455	460	
Tyr Pro Ala Pro Asn	Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg			
465	470	475	480	
Lys Gly Asp Arg Glu	Ala Gln Val Phe Val Arg Leu Arg Arg His Arg			
	485	490	495	
Ala Lys Gln Ala Ser	Gln His Ala Leu Arg Pro Ala Pro			
	500	505		

&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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<210> 2920  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Cys Cys Gly Asn Gln Ala Ala Gly Asn Asp Ala Leu Gln Asp Val Leu  
 50 55 60  
 Ser Leu Leu Asn Asp Leu Ser Arg Ser His Ile Gly Lys Ala Ile Leu  
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 Ser Gln Pro Ala Cys Val Ser Lys Leu Leu Ser Leu Leu Leu Asp Gln  
 85 90 95  
 Arg Pro Ser Pro Lys Leu Val Leu Ile Leu Gln Leu Cys Arg Ala  
 100 105 110  
 Ala Leu Pro Leu Met Ser Val Glu Asp Cys Gly Asn Val Glu Leu Pro  
 115 120 125  
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<210> 2921  
 <211> 1855  
 <212> DNA  
 <213> Homo sapiens

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1855

&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
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Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
420	425	430	
Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

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Arg Leu Gln Pro  
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440

445

<210> 2923  
<211> 572  
<212> DNA  
<213> Homo sapiens

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gaaacagcgt ttattgtgga ggggagctgg gcggggctca gcctcggaga actggcagta  
240  
cagccgcccc agcctcggct ccacccatag ccggaacggg atctccagga tggcagagaa  
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360  
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420  
tagccataca tgaccatgtc tgacacgggg atatgagagg agtccgtcat ctctcgaaac  
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572

<210> 2924  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2924  
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20 25 30  
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro  
35 40 45  
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
50 55 60  
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly  
65 70 75 80  
Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln  
85 90

<210> 2925  
<211> 1999  
<212> DNA  
<213> Homo sapiens

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360  
gaggactgta aagaagtgct tcttgaattt aggaagaaaa ttgcagagaa caaagccaaa  
420  
gcagtcagga aggatattca gagactatcc ttaaataacg acatatttga ggcgaactct  
480  
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960  
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1320  
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 1980  
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&lt;210&gt; 2926

&lt;211&gt; 305

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2926

Lys	Lys	Val	Lys	Lys	Gly	Glu	Ile	Arg	Asp	Leu	Lys	Thr	Lys	Thr	Arg
1				5					10					15	
Glu	Asp	Pro	Lys	Glu	Asn	Arg	Lys	Thr	Lys	Lys	Glu	Lys	Phe	Val	Glu
			20					25					30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
		35					40					45			
Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
	50					55					60				
Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
65					70					75					80
His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
			85						90					95	
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
			100					105					110		
Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
		115				120						125			
Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
	130					135						140			
Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
145					150					155					160
Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
			165						170					175	
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
			180					185					190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
		195					200					205			
Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
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Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg	Lys
225					230					235				240	
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				245						250					255				
Lys	Glu	Asn	Lys	Gln	Ser	Leu	Lys	Glu	Arg	Arg	Asn	Thr	Arg	Asp	Glu				
			260					265					270						
Thr	Asp	Thr	Trp	Ala	Tyr	Ile	Ala	Ala	Glu	Gly	Asp	Gln	Glu	Val	Leu				
	275						280					285							
Asp	Ser	Val	Cys	Gln	Ala	Asp	Glu	Asn	Ser	Gly	Glu	Phe	Gly	Ile	Ile				
	290					295					300								
Leu																			
305																			

&lt;210&gt; 2927

&lt;211&gt; 1084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2927

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1080
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1084

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<210> 2928  
 <211> 292  
 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Ser Leu Arg Pro Ala Thr Phe Ser Gly Val Asn Cys Leu Ala Tyr Asp  
 35 40 45  
 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
 50 55 60  
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
 65 70 75 80  
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu  
 85 90 95  
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
 100 105 110  
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp  
 115 120 125  
 Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu  
 130 135 140  
 Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His  
 145 150 155 160  
 Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val  
 165 170 175  
 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu  
 180 185 190  
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
 195 200 205  
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
 210 215 220  
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His  
 225 230 235 240  
 Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr  
 245 250 255  
 Met Asp Arg Gly Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu  
 260 265 270  
 Gly Ser Glu Pro Lys Val Tyr Leu Leu Tyr Arg Pro Gly His Tyr Asp  
 275 280 285  
 Ile Leu Tyr Lys  
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<210> 2929  
 <211> 4920  
 <212> DNA  
 <213> Homo sapiens

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420  
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Ile	Val	Lys	Ser	Met	Ser	Val	Asp	Glu	Thr	Asp	Lys	Ser	Pro	Cys	Glu
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Gly	Asn	Ser	Ser	Leu	Arg	Arg	Thr	Lys	Arg	Lys	Ala	Pro	Ser	Pro	Pro
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Ser Gln Glu Gln Cys Thr Ala Pro Lys Leu Met Glu Glu Thr Ser Val
      420              425              430
Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser
      435              440              445
Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu
      450              455              460
Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser
465              470              475              480
Gln Asp Ile Pro Phe Val Ser Thr Asp Ile Ile Asn Thr Leu Lys Asn
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Asp Pro Asp Ser Ala Leu Gly Asn Gly Ser Gly Glu Phe Ser Gln Asn
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Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly
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Met Thr Thr Tyr Lys Ile Val Pro Pro Lys Ser Leu Glu Ile Ser Lys
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 <213> Homo sapiens

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 Asp Lys Pro Asp Ser Val Leu Thr His His Val Pro Arg Asn Leu Gln  
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<212> PRT

<213> Homo sapiens

<400> 2934

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Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
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Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
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Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
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<212> PRT  
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Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu			
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Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys			
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&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

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Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
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Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
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Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
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Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
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Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
115	120	125	
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
130	135	140	
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
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Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
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Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
180	185	190	
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
195	200	205	
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
210	215	220	
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
225	230	235	240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys			
245			

&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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2100

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 2405

<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

Met	Ala	Glu	Leu	Gln	Glu	Val	Gln	Ile	Thr	Glu	Glu	Lys	Pro	Leu	Leu	1	5	10	15
Pro	Gly	Gln	Thr	Pro	Glu	Ala	Ala	Lys	Thr	His	Ser	Val	Glu	Thr	Pro	20	25	30	
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg	35	40	45	
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys	50	55	60	
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn	65	70	75	80
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro	85	90	95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp	100	105	110	
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly	115	120	125	
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn	130	135	140	
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn	145	150	155	160
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr	165	170	175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu	180	185	190	
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr	195	200	205	
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn	210	215	220	
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg	225	230	235	240
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala	245	250	255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu	260	265	270	
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<210> 2942
<211> 229
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 2942

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 20 25 30  
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
 210 215 220  
 Gln Asp Pro Gln Ala  
 225

&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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 120  
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 180  
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 240  
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 360  
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 420  
 aacgcccaatt ataccatcca gtctttgaag gacaccaaga ccacggttga tgctatgaaa  
 480

ctgggagtaa aggaaatgaa gaaggcatat aagcaagtga agatcgacca gattgaggat  
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 720  
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 780  
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 840  
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 900  
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 a  
 1501

&lt;210&gt; 2944

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2944

Met	Asn	Arg	Leu	Phe	Gly	Lys	Ala	Lys	Pro	Lys	Ala	Pro	Pro	Pro	Ser
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Leu	Thr	Asp	Cys	Ile	Gly	Thr	Val	Asp	Ser	Arg	Ala	Glu	Ser	Ile	Asp
		20						25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
		50				55					60				
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70						75				80	
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<210> 2945
<211> 3331
<212> DNA
<213> Homo sapiens
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2174

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1020  
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1080  
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1140  
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 3331

&lt;210&gt; 2946

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

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		20					25						30		
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
		35				40						45			
Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
		50				55					60				
Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
65				70						75				80	
Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
				85					90					95	
Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
		100						105					110		
Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
		115					120					125			
Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg
		130				135					140				
Ser	Leu	Lys	Lys	Gly	Val	Gln	Gly	Gly	Glu	Lys	Ala	Leu	Glu	Ile	Cys

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          165          170          175
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          180          185          190
Ala Glu Arg Glu Ser Ala Glu Val Val Val Lys Glu Gly Leu Ala Glu
          195          200          205
Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu
          210          215          220
Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala
225          230          235          240
Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp
          245          250          255
Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala
          260          265          270
Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg
          275          280          285
His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe
          290          295          300
Trp Met Thr Ala Phe Arg Asn His Pro Gln Leu Ser Ala Met Ile Arg
305          310          315          320
Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys
          325          330          335
Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Phe Arg
          340          345          350
Arg Asn Pro Tyr Phe Arg Asn Lys Leu Ile Val Lys Glu Tyr Glu Val
          355          360          365
Arg Ser Ser Gly Arg Val Val Ser Leu Ser Thr Pro Ile Ile Trp Arg
          370          375          380
Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile
385          390          395          400
Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp
          405          410          415
Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln
          420          425          430
Tyr Tyr Leu Leu Arg Glu Gly Val Arg Arg Ala Arg Arg Arg Pro Leu
          435          440          445
Arg Glu Pro Val Glu Ile Pro Arg Pro Phe Gly Phe Gln Ser Gly
          450          455          460

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&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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120
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240

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&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

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&lt;210&gt; 2949

&lt;211&gt; 880

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2949

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<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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<211> 3478

<212> DNA

<213> Homo sapiens

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

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&lt;210&gt; 2954

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2954

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2958

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&lt;213&gt; Homo sapiens

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<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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			20					25					30		
Gly	Glu	Glu	Gln	Ala	Gln	Tyr	Cys	Arg	Ala	Ala	Glu	Glu	Leu	Ser	Lys
		35					40					45			
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	50					55				60					
Leu	Glu	Thr	Leu	Leu	Arg	Tyr	Tyr	Asp	Gln	Ile	Cys	Ser	Ile	Glu	Pro
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Lys	Phe	Pro	Phe	Ser	Glu	Asn	Gln	Ile	Cys	Leu	Thr	Phe	Thr	Trp	Lys
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Asp	Ala	Phe	Asp	Lys	Gly	Ser	Leu	Phe	Gly	Gly	Ser	Val	Lys	Leu	Ala
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2195

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 675 680 685  
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 785 790 795 800  
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 <212> PRT  
 <213> Homo sapiens

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 Pro Asp Glu Asp Leu Ser Xaa Arg Asn Lys Glu Pro Pro Ala Pro Ala  
 35 40 45  
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala  
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 <213> Homo sapiens

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 <212> PRT

<213> Homo sapiens

<400> 2964

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          20           25           30
Gly Trp Arg Gly Asp Thr Cys Gln Ser Gly Glu Ala Gly Ser Thr Leu
          35           40           45
Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
          50           55           60
Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
65           70           75           80
Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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840

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&lt;210&gt; 2966

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

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<212> DNA
<213> Homo sapiens

<400> 2967
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&lt;210&gt; 2968

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

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Gly	Pro	Ser	Lys	Ser	Pro	Ser	Gly	Val	Arg	Cys	Cys	Gly	Ala	Ala	Ala
			20					25					30		
Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
		35					40					45			
Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
	50					55					60				
Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu

65		70		75		80									
Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
				85					90					95	
Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
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 <212> DNA  
 <213> Homo sapiens

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 35 40 45  
 Met Glu Thr Leu Asn Thr Leu Lys Tyr Ala Asn Arg Ala Arg Asn Ile  
 50 55 60  
 Lys Asn Lys Val Val Val Asn Gln Asp Lys Thr Ala Ser Lys Ser Met

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 <212> DNA  
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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

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Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
65          70          75          80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
          85          90          95
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
          100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
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Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
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Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
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Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
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Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
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 <213> Homo sapiens

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&lt;210&gt; 2976

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2976

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&lt;210&gt; 2977

&lt;211&gt; 1420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2977

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&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

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		20						25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35					40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
		50				55					60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65					70					75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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 Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg  
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 Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu  
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 195 200 205  
 Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly  
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 Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro  
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 Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His  
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 Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala  
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 Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg  
 305 310 315 320  
 Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu  
 325 330 335  
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<210> 2979  
 <211> 2191  
 <212> DNA  
 <213> Homo sapiens

<400> 2979  
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2040

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 2191

<210> 2980  
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 <212> PRT  
 <213> Homo sapiens

<400> 2980  
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 Gly Thr Glu His Gly Gln Pro Phe Ala Arg Gly Trp Gly Ala Trp Gly  
 35 40 45  
 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly  
 50 55 60  
 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala  
 65 70 75 80  
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr  
 85 90 95  
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu  
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 Ser Met Cys Phe Gly Asp Gly Ala Gly Ala Ala Cys  
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 <212> DNA  
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<210> 2982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2982

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Ser	Phe	Ser	Ser	Ser	Ser	Gln	Ser	Ser	Ser	Ser	Thr	Asp	Ala	Xaa	Gln
			20					25					30		
His	Ser	Ser	Ser	Ser	Glu	Glu	Ser	Thr	Lys	Arg	Thr	Ser	His	Ser	Lys
			35				40					45			
Leu	Pro	Glu	Gln	Glu	Ala	Ala	Glu	Ala	Asp	Leu	Ser	Asn	Met	Glu	Arg
			50			55					60				
Val	Ser	Leu	Ser	Thr	Ala	Asp	Pro	Gln	Gly	Val	Thr	Tyr	Ala	Glu	Leu
65					70					75				80	
Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
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Pro	Gly	Ser	His	Glu	Tyr	Ala	Ala	Leu	Lys	Val					
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<210> 2983

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2983

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614

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<212> PRT  
<213> Homo sapiens

<400> 2984  
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Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr  
35 40 45  
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser  
50 55 60  
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp  
65 70 75 80  
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp  
85 90 95  
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser  
100 105 110  
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His  
115 120 125  
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly  
130 135 140  
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly  
145 150 155 160  
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr  
165 170 175  
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys  
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<210> 2985  
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 2986

&lt;211&gt; 988

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2986

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		20					25					30			
Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
		50				55				60					
Leu	Ile	Lys	Thr	Asn	Lys	Lys	His	Ile	His	Ser	Arg	Ser	Thr	Leu	Glu
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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
			85					90						95	
Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
		100						105					110		
Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

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Val	Ser	Ala	Ser	Gly	Lys	Glu	Met	Asp	Trp	Ala	Gln	Met	Ala	Cys	His	
	130						135					140				
Arg	Cys	Leu	Val	Tyr	Leu	Gly	Asp	Leu	Ser	Arg	Tyr	Gln	Asn	Glu	Leu	
145					150					155				160		
Ala	Gly	Val	Asp	Thr	Glu	Leu	Leu	Ala	Glu	Arg	Phe	Tyr	Tyr	Gln	Ala	
				165					170					175		
Leu	Ser	Val	Ala	Pro	Gln	Ile	Gly	Met	Pro	Phe	Asn	Gln	Leu	Gly	Thr	
		180					185					190				
Leu	Ala	Gly	Ser	Lys	Tyr	Tyr	Asn	Val	Glu	Ala	Met	Tyr	Cys	Tyr	Leu	
	195						200				205					
Arg	Cys	Ile	Gln	Ser	Glu	Val	Ser	Phe	Glu	Gly	Ala	Tyr	Gly	Asn	Leu	
	210					215					220					
Lys	Arg	Leu	Tyr	Asp	Lys	Ala	Ala	Lys	Met	Tyr	His	Gln	Leu	Lys	Lys	
225					230					235				240		
Cys	Glu	Thr	Arg	Lys	Leu	Ser	Pro	Gly	Lys	Lys	Arg	Cys	Lys	Asp	Ile	
				245					250					255		
Lys	Arg	Leu	Leu	Val	Asn	Phe	Met	Tyr	Leu	Gln	Ser	Leu	Leu	Gln	Pro	
			260				265					270				
Lys	Ser	Ser	Ser	Val	Asp	Ser	Glu	Leu	Thr	Ser	Leu	Cys	Gln	Ser	Val	
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Leu	Glu	Asp	Phe	Asn	Leu	Cys	Leu	Phe	Tyr	Leu	Pro	Ser	Ser	Pro	Asn	
	290				295						300					
Leu	Ser	Leu	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Tyr	Glu	Ser	Gly	Tyr	Ala	
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Phe	Leu	Pro	Asp	Leu	Leu	Ile	Phe	Gln	Met	Val	Ile	Ile	Cys	Leu	Met	
				325					330					335		
Cys	Val	His	Ser	Leu	Glu	Arg	Ala	Gly	Ser	Lys	Gln	Tyr	Ser	Ala	Ala	
			340					345				350				
Ile	Ala	Phe	Thr	Leu	Ala	Leu	Phe	Ser	His	Leu	Val	Asn	His	Val	Asn	
		355					360					365				
Ile	Arg	Leu	Gln	Ala	Glu	Leu	Glu	Glu	Gly	Glu	Asn	Pro	Val	Pro	Ala	
	370					375					380					
Phe	Gln	Ser	Asp	Gly	Thr	Asp	Glu	Pro	Glu	Ser	Lys	Glu	Pro	Val	Glu	
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Lys	Glu	Glu	Glu	Pro	Asp	Pro	Glu	Pro	Pro	Pro	Val	Thr	Pro	Gln	Val	
				405					410					415		
Gly	Glu	Gly	Arg	Lys	Ser	Arg	Lys	Phe	Ser	Arg	Leu	Ser	Cys	Leu	Arg	
			420					425				430				
Arg	Arg	Arg	His	Pro	Pro	Lys	Val	Gly	Asp	Asp	Ser	Asp	Leu	Ser	Glu	
		435					440					445				
Gly	Phe	Glu	Ser	Asp	Ser	Ser	His	Asp	Ser	Ala	Arg	Ala	Ser	Glu	Gly	
	450					455					460					
Ser	Asp	Ser	Gly	Ser	Asp	Lys	Ser	Leu	Glu	Gly	Gly	Gly	Thr	Ala	Phe	
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Asn	Leu	Leu	Leu	Gln	Pro	Thr	Thr	Asn	Pro	His	Thr	Ser	Ala	Ser	His
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Arg	Pro	Cys	Val	Asn	Gly	Asp	Val	Asp	Lys	Pro	Ser	Glu	Pro	Ala	Ser
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Glu	Glu	Gly	Ser	Glu	Ser	Glu	Gly	Ser	Glu	Ser	Ser	Gly	Arg	Ser	Cys
		595					600					605			
Arg	Asn	Glu	Arg	Ser	Ile	Gln	Glu	Lys	Leu	Gln	Val	Leu	Met	Ala	Glu
	610					615				620					
Gly	Leu	Leu	Pro	Ala	Val	Lys	Val	Phe	Leu	Asp	Trp	Leu	Arg	Thr	Asn
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Pro	Asp	Leu	Ile	Ile	Val	Cys	Ala	Gln	Ser	Ser	Gln	Ser	Leu	Trp	Asn
			645						650					655	
Arg	Leu	Ser	Val	Leu	Leu	Asn	Leu	Leu	Pro	Ala	Ala	Gly	Glu	Leu	Gln
		660						665					670		
Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu	Gly
		675					680				685				
Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp	Met
	690					695					700				
Ala	Leu	Arg	Asn	Leu	Pro	Pro	Leu	Arg	Ala	Ala	His	Arg	Arg	Phe	Asn
705					710					715					720
Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val	Val
			725						730					735	
Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg	Leu	Gln
		740						745				750			
Gly	Ser	Ile	Leu	Gln	Phe	Asn	Pro	Glu	Val	Gly	Ile	Phe	Val	Ser	Ile
		755					760					765			
Ala	Gln	Ser	Glu	Gln	Glu	Ser	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Gln	Phe
	770					775					780				
Arg	Met	Ala	Gln	Glu	Glu	Ala	Arg	Arg	Asn	Arg	Leu	Met	Arg	Asp	Met
785					790					795					800
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Glu	Val	Ser	Gln	Leu	Glu	Gly	Ser	Leu
			805						810					815	
Gln	Gln	Pro	Lys	Ala	Gln	Ser	Ala	Met	Ser	Pro	Tyr	Leu	Val	Pro	Asp
		820						825					830		
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala	Thr
		835					840					845			
Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp	Gly	Leu
	850					855				860					
Asp	Leu	Leu	Lys	Lys	Glu	His	Pro	Gly	Ala	Arg	Asp	Gly	Ile	Arg	Tyr
865					870					875					880
Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln	Lys
			885						890					895	
Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp	Ala
		900						905					910		
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln	Leu	Thr
		915					920					925			
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Asp	Pro	Ser	Gly	Met	Val	Thr	Ile	
	930					935				940					
Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro	Met
945					950					955					960
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys	Asn
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Val	Leu	Asp	Phe	Tyr	Lys	Gln	Trp	Lys	Glu	Ile	Gly				

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985

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 <211> 1016  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gaaaggcggg cctgaaattc acaggggaga gcggatattc caggaggcag tctaagttat  
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 ctgaggcgtg caactcacc agtgagacca agttactgta gttctccagc atcacgtccc  
 240  
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 360  
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 420  
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 840  
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 900  
 ctgacctcat tactcgccng actccggctc ccaaagtgtt ggaattacna gcgtgagaca  
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<210> 2988  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 2988  
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 Ala His Cys Lys Leu His Leu Pro Gly Ser His His Pro Pro Ala Ser  
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 Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

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ttccccagtt gtgggagcag acgcgtgggc gcatcgcggg cgggcagggc ctgaagtgca  
180  
gctatgtttc cagtgttctc tggctgtttc caagagctac aagaaaagaa taaatctctg  
240  
gagttggtgt cctttgagga ggtagctgtg cacttcacct gggaggagtg gcaggacctg  
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420  
ccatggatag tagaagaaac cctaaacctg agactttcag gtggaagcaa gaagcaagtt  
480  
ttctcaggta ttgcccacag gagcctggtg gagctccagg aggtttgatc tctcttgta  
540  
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720  
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900  
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ggcatgtaca aagagaattt tatgctgcct gtgtacagtt attaatttgt aagtacactc  
1080  
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1140  
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1185

<210> 2990  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 2990  
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 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg  
 35 40 45  
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys  
 50 55 60  
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro  
 65 70 75 80  
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys  
 85 90 95  
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln  
 100 105 110  
 Glu Val

<210> 2991  
 <211> 980  
 <212> DNA  
 <213> Homo sapiens

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 420  
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 660  
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 720

cccacagaat ccaatggagc accgtgggtt gtttccattg ggacatcaaa gttagctgac  
780  
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840  
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980

<210> 2992  
<211> 64  
<212> PRT  
<213> Homo sapiens

<400> 2992  
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His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro  
20 25 30  
Val Leu Cys Ser Gly Leu Leu Leu Gly Gly Leu Gly Ala Ala His Phe  
35 40 45  
Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser  
50 55 60

<210> 2993  
<211> 687  
<212> DNA  
<213> Homo sapiens

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cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg  
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ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct  
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300  
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360  
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420  
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540  
ggacctactg gctctgtcaa aatcggggac ctgggcctgg ccacgctcaa gcgcgcctcc  
600  
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660

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<210> 2994  
<211> 229  
<212> PRT  
<213> Homo sapiens

<400> 2994  
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20 25 30  
Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu  
35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
195 200 205  
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
210 215 220  
Val Asp Val Tyr Ala  
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<210> 2995  
<211> 1879  
<212> DNA  
<213> Homo sapiens

<400> 2995  
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taataaaaatt aagcagtcaa aagaagtagc aaaaacaaga tagtcattca tatatacaga  
120  
acatatagat tcattttctag ttgattcaat cctattttatg tattttaaatt acaaaataat  
180  
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240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac  
300  
ttttttattt ttattttttac tttattatta ttattattat ttttgagatg gagtctcact  
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480  
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540  
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1380  
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1560  
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1620  
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1680  
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1740  
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1860

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1879

<210> 2996  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2996  
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20 25 30  
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln  
35 40 45  
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser  
50 55 60  
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys  
65 70 75 80  
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg  
85 90 95  
Thr Pro Asp Leu Lys  
100

<210> 2997  
<211> 800  
<212> DNA  
<213> Homo sapiens

<400> 2997  
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gagccatcca aagtgcacatc tccagtggtc acctcttcca ccataaaaga cattgtttct  
120  
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccacctg  
180  
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240  
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcatg  
300  
tcctctagca gaggacctag cctgatcag tccacaatgt cacaagacat atccactgaa  
360  
gtgatcacca ggctctctac ctcccccatc aagacagaat ctacagaaat gaccattacc  
420  
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<210> 2998  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 2998  
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 35 40 45  
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
 50 55 60  
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
 65 70 75 80  
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
 85 90 95  
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
 100 105 110  
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
 115 120 125  
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
 130 135 140  
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
 145 150 155 160  
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
 165 170 175  
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
 180 185 190  
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
 195 200 205  
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
 210 215 220  
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
 225 230 235 240  
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro  
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 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe  
 260 265

<210> 2999  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 2999  
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 420  
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc  
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&lt;210&gt; 3000

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3000

Met	Cys	Ser	Ser	Gln	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
1				5					10					15	
Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35				40						45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
65					70				75					80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
			85					90					95		
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
		100						105				110			
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115					120				125				
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135				140					
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
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Trp	Ala	Val	Thr	Ala	Pro	Gly									
					165										

&lt;210&gt; 3001

&lt;211&gt; 1092

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3001

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 420  
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 1080  
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 1092

&lt;210&gt; 3002

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
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Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40				45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

<400> 3004															
Met	Glu	Pro	Arg	Ala	Val	Ala	Glu	Ala	Val	Glu	Thr	Gly	Glu	Glu	Asp
1				5					10					15	
Val	Ile	Met	Glu	Ala	Leu	Arg	Ser	Tyr	Asn	Gln	Glu	His	Ser	Gln	Ser
			20					25					30		
Phe	Thr	Phe	Asp	Asp	Ala	Gln	Gln	Glu	Asp	Arg	Lys	Arg	Leu	Ala	Glu
			35				40					45			
Leu	Leu	Val	Ser	Val	Leu	Glu	Gln	Gly	Leu	Pro	Pro	Ser	His	Arg	Val
	50					55				60					
Ile	Trp	Leu	Gln	Ser	Val	Arg	Ile	Leu	Ser	Arg	Asp	Arg	Asn	Cys	Leu
65					70					75				80	
Asp	Pro	Phe	Thr	Ser	Arg	Gln	Ser	Leu	Gln	Ala	Leu	Ala	Cys	Tyr	Ala
				85					90					95	
Asp	Ile	Ser	Val	Ser	Glu	Gly	Ser	Val	Pro	Glu	Ser	Ala	Asp	Met	Asp
			100					105					110		
Val	Val	Leu	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Leu	Val	Leu	Ser	Ser
		115					120					125			
Pro	Val	Ala	Gln	Met	Leu	Ala	Ala	Glu	Ala	Arg	Leu	Val	Val	Lys	Leu

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 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser  
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<210> 3005  
 <211> 799  
 <212> DNA  
 <213> Homo sapiens

<400> 3005  
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 180  
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 240  
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 300  
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 480  
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<210> 3006  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 3006  
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 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu  
 20 25 30  
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg  
 35 40 45  
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys  
 50 55 60  
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

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65          70          75          80
Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg
      85          90          95
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe
      100         105         110
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu
      115         120         125
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp
      130         135         140
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val
      145         150         155         160
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met
      165         170         175
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln
      180         185         190
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile
      195         200         205
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys
      210         215         220
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser
      225         230         235         240
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp
      245         250         255
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu
      260         265

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&lt;210&gt; 3007

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3007

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120
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180
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240
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300
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360
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420
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536

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&lt;210&gt; 3008

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
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Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
      85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
      100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
      115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
      130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145          150          155          160
Pro Ser Arg

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&lt;210&gt; 3009

&lt;211&gt; 1335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3009

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420
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660

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 aatagactct cccatcccaa catccttagg ttcatgggtg tatgtgttca tcaaggacaa  
 780  
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 900  
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<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
			20					25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35					40					45			
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50					55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70				75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
				85					90					95	
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100						105					110		
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
	115					120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145					150					155				160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
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<210> 3011
<211> 3253
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 3012

&lt;211&gt; 870

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3012

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Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
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Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85					90					95		
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
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Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
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Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
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Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
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Ala	Thr	Asp	Leu	Tyr	Gln	Val	Pro	Pro	Gly	Pro	Gly	Gly	Pro	Ala	Gln

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<210> 3014

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<400> 3014

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Leu Ala Ser Gly Leu Asp Val Ile Asp Gln Val Leu Glu Glu Gln Thr
        35          40          45
Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp
       50          55          60
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Ile Asp
  
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<400> 3016

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Lys Pro Pro Trp Gln Leu Cys Pro Arg Ala Phe Ala Phe Cys His Arg
        35          40          45
Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val
  
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 <212> PRT  
 <213> Homo sapiens

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 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val  
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 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly  
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&lt;210&gt; 3020

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3020

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Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
		20					25				30				
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
		35				40					45				
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
		50				55									

&lt;210&gt; 3021

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3021

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1008

&lt;210&gt; 3022

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3022

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			20					25					30		
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&lt;210&gt; 3023

&lt;211&gt; 1834

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3023

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900  
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960  
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1020  
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1080  
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1140  
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1200  
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1260  
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1320  
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1620  
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1680  
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1834

&lt;210&gt; 3024

<211> 347  
 <212> PRT  
 <213> Homo sapiens

<400> 3024

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			20					25					30		
Asn	Leu	Ile	Arg	Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile
		35				40					45				
Met	Leu	Arg	Ser	His	Val	Leu	Val	Met	Ser	Phe	Ile	Gly	Lys	Asp	Asp
	50				55					60					
Met	Pro	Ala	Pro	Leu	Leu	Lys	Asn	Val	Gln	Leu	Ser	Glu	Ser	Lys	Ala
65				70					75					80	
Arg	Glu	Leu	Tyr	Leu	Gln	Val	Ile	Gln	Tyr	Met	Arg	Arg	Met	Tyr	Gln
			85					90						95	
Asp	Ala	Arg	Leu	Val	His	Ala	Asp	Leu	Ser	Glu	Phe	Asn	Met	Leu	Tyr
		100						105					110		
His	Gly	Gly	Gly	Val	Tyr	Ile	Ile	Asp	Val	Ser	Gln	Ser	Val	Glu	His
	115					120					125				
Asp	His	Pro	His	Ala	Leu	Glu	Phe	Leu	Arg	Lys	Asp	Cys	Ala	Asn	Val
	130					135					140				
Asn	Asp	Phe	Phe	Met	Arg	His	Ser	Val	Ala	Val	Met	Thr	Val	Arg	Glu
145				150					155					160	
Leu	Phe	Glu	Phe	Val	Thr	Asp	Pro	Ser	Ile	Thr	His	Glu	Asn	Met	Asp
			165					170						175	
Ala	Tyr	Leu	Ser	Lys	Ala	Met	Glu	Ile	Ala	Ser	Gln	Arg	Thr	Lys	Glu
		180						185					190		
Glu	Arg	Ser	Ser	Gln	Asp	His	Val	Asp	Glu	Glu	Val	Phe	Lys	Arg	Ala
	195						200					205			
Tyr	Ile	Pro	Arg	Thr	Leu	Asn	Glu	Val	Lys	Asn	Tyr	Glu	Arg	Asp	Met
	210					215					220				
Asp	Ile	Ile	Met	Lys	Leu	Lys	Glu	Glu	Asp	Met	Ala	Met	Asn	Ala	Gln
225				230					235					240	
Gln	Asp	Asn	Ile	Leu	Pro	Asp	Cys	Tyr	Arg	Ile	Glu	Glu	Arg	Phe	Val
			245					250						255	
Arg	Ser	Ser	Glu	Gly	Pro	Cys	Thr	Leu	Glu	Asn	Gln	Val	Glu	Glu	Arg
		260						265					270		
Thr	Cys	Ser	Asp	Ser	Glu	Asp	Ile	Gly	Ser	Ser	Glu	Cys	Ser	Asp	Thr
	275					280					285				
Asp	Ser	Glu	Glu	Gln	Gly	Asp	His	Ala	Arg	Pro	Lys	Lys	His	Thr	Thr
	290					295					300				
Asp	Pro	Asp	Ile	Asp	Lys	Lys	Glu	Arg	Lys	Lys	Met	Val	Lys	Glu	Ala
305				310					315					320	
Gln	Arg	Glu	Lys	Arg	Lys	Asn	Lys	Ile	Pro	Lys	His	Val	Lys	Lys	Arg
			325					330						335	
Lys	Glu	Lys	Thr	Ala	Lys	Thr	Lys	Lys	Gly	Lys					
			340					345							

<210> 3025  
 <211> 1370  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3025

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120  
agctttctgaa gcatctaggt gatctttctta aatctttgac aggaaagagt aggaaacttt  
180  
ttggcagact tttacctggt gaatggactt gttttagaat caaggaaaag aagagaacat  
240  
ctcagtgaag aggatattct tcgaaataag gccatcatgg agagtttgag taaaggtgga  
300  
aacataatgg aacagaattt tgagccgatt cgaagacagt ctcttacacc tcctcctcag  
360  
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcatctgggt  
420  
agagaattgg tgtgcaaaga gagtaagaaa acgttttaaag ctacgatagc catgagccag  
480  
gaatttcctt tagggataga gttattattg aatgttttag aagtagtagc tcccttcaag  
540  
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa  
600  
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac  
660  
gatgaatttg atggctccat ctttactata cctgatgact acaaggaaga cccaagccgt  
720  
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780  
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840  
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900  
cagcgagttt tctgatgtgc cattttttgt ctttttaaaa atatacatat tataaatgta  
960  
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1020  
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1080  
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1140  
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1320  
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1370

&lt;210&gt; 3026

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3026

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Met Glu Ser Leu Ser Lys Gly Gly Asn Ile Met Glu Gln Asn Phe Glu
 1           5           10           15
Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
          20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
          35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
          50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
          85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
          100          105          110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
          115          120          125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
          130          135          140
Asp Pro Ser Arg Phe Pro Asp Leu
145           150

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&lt;210&gt; 3027

&lt;211&gt; 1154

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

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nccgttttcc cgtcgcacgt ggtggccact gttggcttct gaatggtttg caaggcggat
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atccacgccca aggccttttg atcgcccggtg ggtacatccg tctgagccgt tcctttccat
120
cgcagacggc ggcctccgcg gcgctctcca gtcattggact accggcgggt tctcatgagc
180
cgggtggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
360
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420
aaccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca
480
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600
aaagataagg cagacagagc aactgtagaa cagggtgttg atcccagaac aagaatgatt
660
ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
720
aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
780

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tataaaaactt ctatttttgggt gttcaaagat cgggataaat atgtaagtgg agaattcaga  
 840  
 ttttcgtcatg gctattgttaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa  
 900  
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg  
 960  
 ctaagaagtc atgttcttgt catgagtttc atcggtaaag atgacatttc ttttcattca  
 1020  
 aggccctgcac cactcttgaa aaatgtccag ttatcagaat ccaaggctcg ggagttgtac  
 1080  
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 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Gly	Tyr	Asp	
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
				85					90					95	
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150					155				160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180					185						190		
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235				240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245						250				255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

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                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
                275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
                290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
                325                330

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&lt;210&gt; 3029

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3029

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acgcgtgatg cacggaaggg ccttcgggtt ttgcattttc cttatctgct gaccttacag
60
ctgaaaagat tcgattttga ttatacaacc atgcatagga ttaaactgaa tgatcgaatg
120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
agtggaactg aaaagatctc aaaatctgga cctgaaaaga attc
344

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&lt;210&gt; 3030

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3030

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Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu
1          5          10          15
Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
20          25          30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
35          40          45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
50          55          60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65          70          75          80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
85          90          95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
100         105         110
Lys Asn

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&lt;210&gt; 3031

&lt;211&gt; 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

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 cctccccctt cctattttgc cacgttttac tcgtgcacac cccggatgaa ccgcagattg  
 120  
 gttggtcctg atgttattcc cctgccacac atctacggag ctcgaatcaa aggtgtggaa  
 180  
 gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag  
 240  
 gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat  
 300  
 ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat  
 360  
 gcatccacct caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc  
 420  
 ccacccttga ggaccaggtc gaagagtgc cctgtgtctc atccttctga ggagagagct  
 480  
 gccccagtgc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca  
 540  
 gtgactctga ggagaggctt gagatct  
 567

&lt;210&gt; 3032

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Ala	Glu	Glu	Ala	Glu	Asp	His	Gly	Arg	Ile	Pro	Asp	Pro	Asp	Asp	Phe
1				5				10						15	
Val	Pro	Pro	Val	Pro	Pro	Pro	Ser	Tyr	Phe	Ala	Thr	Phe	Tyr	Ser	Cys
			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
			35				40					45			
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
			50			55					60				
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65					70				75					80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
			85					90						95	
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
			100					105					110		
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
			115				120					125			
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
			130			135					140				
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
145					150				155					160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
			165					170						175	
Asp	Leu	Ala	Ala	Val	Thr	Leu	Arg	Arg	Gly	Leu	Arg	Ser			

180

185

<210> 3033  
 <211> 821  
 <212> DNA  
 <213> Homo sapiens

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 180  
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc  
 240  
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 300  
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 360  
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 420  
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 480  
 gaggcctcca agaaaaaaga taaaggacat tcattcttcaa agaaatctga agattctcta  
 540  
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 ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttggtt  
 660  
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac  
 720  
 ctcattgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg  
 780  
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 821

<210> 3034  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 3034  
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 20 25 30  
 Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu  
 35 40 45  
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe  
 50 55 60  
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe  
 65 70 75 80  
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

				85					90					95					
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130					135					140							
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145						150				155					160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180						185					190						
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
		195					200					205							
Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
		210				215					220								

&lt;210&gt; 3035

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

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120
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180
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 <213> Homo sapiens

<400> 3036  
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 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr  
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&lt;210&gt; 3038

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3038

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Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
		35				40					45				
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	50				55					60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65				70				75					80		
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
			85					90					95		
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

2263

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His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg				560
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Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp				
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Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe				
	595		600	605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp				
	610		615	620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu				
625		630		635
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Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu				
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Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu				
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Ile Phe Lys Thr Gly Gly Arg Arg Arg				
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&lt;210&gt; 3039

&lt;211&gt; 1836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3039

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&lt;210&gt; 3040

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3040

Thr Leu Cys His Cys Leu Asp Leu His Ile Arg Ala Ala Leu Met Pro  
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 Leu Pro Asp Thr Ala Thr Gly Leu Asp Trp Thr His Leu Val Asp Ala  
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 Ala Arg Ala Phe Glu Asp Gln Arg Val Ala Ser Phe Cys Thr Leu Thr  
 35 40 45  
 Asp Met Gln His Gly Gln Asp Leu Glu Gly Ala Gln Glu Leu Pro Leu  
 50 55 60  
 Cys Val Asp Pro Gly Ser Gly Lys Glu Phe Met Asp Thr Thr Gly Glu  
 65 70 75 80  
 Arg Ser Pro Ser Pro Leu Thr Gly Lys Val Asn Gln Leu Glu Leu Ile

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			100					105					110					
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu			
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&lt;210&gt; 3041

&lt;211&gt; 1512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3041

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<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
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Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55					60				
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75					80	
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
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		100						105					110		
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
	115						120					125			
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
	130					135						140			
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			165						170					175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
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Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
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 Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met  
 305                      310                      315                      320  
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 325                      330                      335  
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 <212> DNA  
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 20                      25                      30  
 Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe  
 35                      40                      45  
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys  
 50                      55                      60  
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu  
 65                      70                      75                      80  
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr  
 85                      90                      95  
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser  
 100                      105                      110  
 Lys Glu Ile

115

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 <212> DNA  
 <213> Homo sapiens

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 180  
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 300  
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 420  
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 480  
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 605

<210> 3046  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 3046  
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 1 5 10 15  
 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys  
 20 25 30  
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr  
 35 40 45  
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser  
 50 55 60  
 Ser Ser Thr Glu Arg Arg Gln Arg  
 65 70

<210> 3047  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 3047

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 120  
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat  
 180  
 gccaaaaccc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata  
 240  
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata  
 300  
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa  
 360  
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 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
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Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
		20						25					30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
	35					40						45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
	50				55						60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65				70				75						80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85					90						95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
		100					105						110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
		115				120									

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 120  
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 180  
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 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac  
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 480  
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met	Phe	Leu	Val	Arg	Arg	Asp	Ser	Ser	Ser	Lys	Gln	Leu	Val	Leu	Cys
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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50				55					60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75					80
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135						140			
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145					150					155					160
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 180

tcctcggcca ccgtcgcaaca acaggcctcc tcctccccag tccctggagg gactccgaca  
 240  
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 420  
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 660  
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 720  
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 820

&lt;210&gt; 3052

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10						15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40					45			
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55					60				

&lt;210&gt; 3053

&lt;211&gt; 2625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3053

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 60  
 gagcctccga catctaataga atgcttagaa gatataaccg taaaagatgg actttctctc  
 120  
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat  
 180  
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 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac  
360  
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420  
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480  
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540  
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1920

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 1980  
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 2040  
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 2100  
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 2520  
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 2580  
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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

Ser	Gly	Xaa	Ser	Glu	His	Thr	Ser	Xaa	Met	Leu	Ser	Leu	Ser	His	Gln
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Glu	Lys	Pro	Glu	Glu	Pro	Pro	Thr	Ser	Asn	Glu	Cys	Leu	Glu	Asp	Ile
			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65					70					75				80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
			85						90					95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115						120					125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145					150					155				160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
			165						170					175	
Leu	Arg	Asn	Leu	Asp	Ser	Arg	Gln	Cys	Arg	Glu	Thr	His	Lys	Ile	Ala

	180		185		190
Val Phe Tyr	Val Ala Glu Gly	Gln Glu Asp Lys His Ser	Ile Leu Thr		
195	200	205			
Asn Thr Gly Gly Ser Gln Ala Tyr Glu Asp Phe Val Ala Gly Leu Gly					
210	215	220			
Trp Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln					
225	230	235			240
Lys Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr					
245	250	255			
Val Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp					
260	265	270			
Asp Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His					
275	280	285			
Ile Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro					
290	295	300			
Thr Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His					
305	310	315			320
Met Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly					
325	330	335			
Pro Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met					
340	345	350			
Val Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile					
355	360	365			
Pro Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr					
370	375	380			
Ile Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala					
385	390	395			400
Gln Val Phe Ser Pro Ala Pro Tyr His His Leu Pro Ser Asp Ala Asp					
405	410	415			

His

&lt;210&gt; 3055

&lt;211&gt; 905

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3055

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 480

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 905

&lt;210&gt; 3056

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3056

Met	Ser	Tyr	Arg	Thr	Leu	Tyr	Ile	Gly	Thr	Gly	Ala	Asp	Met	Asp	Val
1				5					10					15	
Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
	35						40				45				
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70				75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85					90					95		
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100				105					110			
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
	115					120						125			
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
	130					135				140					
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150				155					160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165				170						175		
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
			180				185					190			
Ser	Val	Pro													
			195												

&lt;210&gt; 3057

&lt;211&gt; 2169

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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420  
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1140  
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&lt;210&gt; 3058

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3058

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			20					25					30		
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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser	
			35				40						45		
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Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
			85					90						95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
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Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu
			180					185					190		
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&lt;210&gt; 3061

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3061

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
			35				40					45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55				60					
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
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Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
			85					90					95		
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

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<211> 183  
<212> PRT  
<213> Homo sapiens

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Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa  
50 55 60  
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly  
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100 105 110  
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<212> DNA  
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&lt;210&gt; 3068

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3068

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		20						25					30		
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
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Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
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Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
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Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu	
				85				90					95		
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100						105					110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
		115					120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
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Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro	Gly
145					150					155				160	
Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ala	Ser	Arg	Pro	Pro
				165					170				175		
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro
		180						185					190		
Pro	Ser	Pro	Ala	Pro	Pro	Pro	Arg	Gly	Glu	Trp	Gly				
		195					200								

&lt;210&gt; 3069

&lt;211&gt; 1561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3069

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c  
1561

&lt;210&gt; 3070

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

```

Met His Leu Lys Asp Leu Gly Leu Asn Phe His Val Ser Val Leu Gly
 1           5           10           15
Glu Thr Phe Thr Asp Val Pro Asp Ile Phe Ser Glu Ala Lys Lys Ala
          20           25           30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
          35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
          50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
          85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
          100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
          115          120          125
Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
          130          135          140
Leu Thr Thr Glu Pro Arg Glu Asp Leu
145           150

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&lt;210&gt; 3071

&lt;211&gt; 3343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

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 3343

&lt;210&gt; 3072

&lt;211&gt; 349

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3072

Met	Leu	Glu	Arg	Arg	Cys	Arg	Gly	Pro	Leu	Ala	Met	Gly	Leu	Ala	Gln
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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
		35					40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
		50				55					60				
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70					75				80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90						95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105						110	
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

115	120	125
Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro		
130	135	140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu		
145	150	155
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro		
165	170	175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu		
180	185	190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala		
195	200	205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala		
210	215	220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys		
225	230	235
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg		
245	250	255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg		
260	265	270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly		
275	280	285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys		
290	295	300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly		
305	310	315
Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala		
325	330	335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu		
340	345	

&lt;210&gt; 3073

&lt;211&gt; 791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3073

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540

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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Arg	Gly	His	Glu	Arg	Phe	Arg	Ile	Ala	Ser	Ala	Cys	Leu	Asp	Glu	Leu
			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro	
	50					55				60					
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70					75					80
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
				85					90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105					110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145					150					155				160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165						170					175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195						200					205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230					235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245						250					255	
Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3075

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180
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ccg
603

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&lt;210&gt; 3076

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3076

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Pro Leu Gly Gly Lys Asn Phe Leu Lys Lys Met Val Gly Lys Asn Pro
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Pro Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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	165		170		175
Ile Lys Ile Ile	Asp Phe Gly Leu	Ala Arg Arg Tyr Lys	Pro Arg Glu		
	180	185	190		
Lys Leu Lys Val	Asn Phe Gly Thr	Pro			
	195	200			

&lt;210&gt; 3077

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3077

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1260

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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

Met	Leu	Val	Val	Glu	Val	Ala	Asn	Gly	Arg	Ser	Leu	Val	Trp	Gly	Ala
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Glu	Ala	Val	Gln	Ala	Leu	Arg	Glu	Arg	Leu	Gly	Val	Gly	Gly	Arg	Thr
			20					25					30		
Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu
			35				40					45			
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly
			50				55					60			
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser
65					70					75				80	
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu
				85					90					95	
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu
			100					105					110		
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu
		115					120					125			
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala
		130					135					140			
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu
145					150					155				160	
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala
				165					170					175	
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro
			180					185					190		
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp
		195					200					205			
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr
		210				215						220			
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe
225					230					235				240	
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala
			245						250					255	
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln
			260					265					270		
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu
		275					280					285			
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser	Leu
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Gln	Trp	Ala	Ser	Leu	Gln										
305					310										

<210> 3079

<211> 1785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3079

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120  
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180  
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240  
gcagctgagg cggtctgtgcc caggaccatt ggggccgagc tgatggagct ggtgcggaga  
300  
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480  
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540  
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600  
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660  
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720  
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780  
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1080  
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1140  
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1320  
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1380  
caccctgtgg agcgttctgg ggtcccggcc ctgacctctt cctgggcttc gggatgcccg  
1440  
cgtcctctgc acccggcgct gcagctcgtt atcgattccg cctttggagg ccggtccgta  
1500

tagtgacttc ccggactctc tcacggttag ccggcaaccc gcggagcccc ctcccccatg  
 1560  
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 1740  
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 1785

<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

Met	Asp	Thr	Leu	Tyr	Thr	Gly	Ser	Ser	Pro	Ser	Glu	Pro	Gly	Ser	Ser	1	5	10	15
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Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro	35	40	45	
Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp	50	55	60	
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala	65	70	75	
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu	85	90	95	
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala	100	105	110	
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser	115	120	125	
Pro	Val	Met	Glu	Gln	Val	Leu	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu	130	135	140	
Ser	Met	Ala	Leu	Pro	Ser	Gly	Gln	Val	Cys	His	Asp	Gln	Gln	Arg	Leu	145	150	155	
Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln	165	170	175	
Arg	Ser	Trp	Ala	Leu	Tyr	Glu	Asp	Glu	Gly	Val	Ile	Arg	Cys	Tyr	Leu	180	185	190	
Glu	Glu	Leu	Leu	His	Ile	Leu	Thr	Asp	Ala	Asp	Pro	Glu	Val	Cys	Lys	195	200	205	
Lys	Met	Cys	Lys	Arg	Asn	Glu	Phe	Glu	Ser	Val	Leu	Ala	Leu	Val	Ala	210	215	220	
Tyr	Tyr	Gln	Met	Glu	His	Arg	Ala	Ser	Leu	Arg	Leu	Leu	Leu	Leu	Lys	225	230	235	
Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu	245	250	255	
Val	Ser	Ser	Val	Leu	Pro	Val	Glu	Leu	Ala	Arg	Asp	Met	Gln	Thr	Asp	260	265	270	
Thr	Gln	Asp	His	Gln	Lys	Leu	Cys	Tyr	Ser	Ala	Leu	Ile	Leu	Ala	Met	275	280	285	
Val	Phe	Ser	Met	Gly	Glu	Ala	Val	Pro	Tyr	Ala	His	Tyr	Glu	His	Leu				

290                      295                      300  
 Gly Thr Pro Phe Ala Gln Phe Leu Leu Asn Ile Val Glu Asp Gly Leu  
 305                      310                      315                      320  
 Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu  
                     325                      330                      335  
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met  
                     340                      345                      350  
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu  
                     355                      360                      365  
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His  
                     370                      375                      380  
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe  
 385                      390                      395                      400  
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala  
                     405                      410                      415  
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp  
                     420                      425                      430  
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg  
                     435                      440                      445  
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu  
                     450                      455                      460  
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro  
 465                      470                      475                      480  
 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly  
                     485                      490                      495  
 Gly Arg Ser Val  
                     500

&lt;210&gt; 3081

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3081

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 120  
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 360  
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 660  
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 720  
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 780  
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 840  
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 960  
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 1020  
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 1200  
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 1260  
 gagaagtacg cggccgagga gtacgacatc ctggtggccg aggagaccgt gggagagccc  
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 1380  
 tccccgctgg cccagaggcc cttcttcgag gcgccctcac cgctggggcg cgtggacctg  
 1440  
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 1500  
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 1620  
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 1800  
 accggcggct cccgggcgcc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat  
 1860  
 gttttgtgta aacgtacaaa accgtttctg gcgatcacga aa  
 1902

&lt;210&gt; 3082

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr  
 1 5 10 15  
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

```

      20      25      30
Val Ser Val His Lys Phe Val Ala Met Trp Arg Lys Ile Leu Gln Asn
      35      40      45
Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly
      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
      405      410

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&lt;210&gt; 3083

&lt;211&gt; 610

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3083

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 120  
 gactggggcag gccggggccc ggcactgggtg ggtgacagtc atacttcgtg gagcccagcg  
 180  
 agcatcccgg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg  
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 300  
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 360  
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 420  
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 610

&lt;210&gt; 3084

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3084

Xaa	Arg	Pro	Ser	Cys	Trp	Glu	Pro	Val	Arg	Pro	Ser	Gly	Ser	Ser	His
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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
			35				40					45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
			50			55					60				
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65					70					75				80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
				85					90					95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100					105					110		
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
			115				120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
			130			135						140			

&lt;210&gt; 3085

&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 120  
 caaaagataa gaaaatggaa attaaggga atctgttcag caacaaagat cttgaggaat  
 180  
 tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg  
 240  
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 300  
 ctgacggagt tatttattca attagaacaa atgggtgtgct tctatttata ccaaggtttg  
 360  
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 420  
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 480  
 ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat  
 540  
 ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac  
 600  
 catacaagat accaaatata gaacttattc atcagagttc ccccttgctg aagagtggag  
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 720  
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 780  
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 840  
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 900  
 catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat  
 960  
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 1080

<210> 3086  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 3086  
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 Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu  
 35 40 45  
 Ile Glu Thr Ile Leu Ala Asn Thr Val Lys  
 50 55

<210> 3087  
<211> 2329  
<212> DNA  
<213> Homo sapiens

<400> 3087  
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120  
gtggaggtgg agccgcccc agatcggcca gtccgagcgt gccggacaca gcagccggaa  
180  
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240  
gatcccatg gattttttgc ttttcctgtc acggatgcaa ttgctcctgg atattcaatg  
300  
ataataaaac atcccatgga ttttggcacc atgaaagaca aaattgtagc taatgaatac  
360  
aagtcagtta cgggaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac  
420  
aataggccag ataccgtgta ctacaagttg gcgaagaaga tccttcacgc aggctttaag  
480  
atgatgagca aacaggcagc tcttttgggc aatgaagata cagctgttga ggaacctgtc  
540  
cctgaagttg taccagtaca agtagaaact gccaaagaaat ccaaaaagcc gagtagagaa  
600  
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&lt;210&gt; 3088

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3088

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Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
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Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
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His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
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Asp	Pro	His	Gly	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro	
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Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
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Glu	Glu	Pro	Val	Pro	Glu	Val	Val	Pro	Val	Gln	Val	Glu	Thr	Ala	Lys
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Lys	Ser	Lys	Lys	Pro	Ser	Arg	Glu	Val	Ile	Ser	Cys	Met	Phe	Glu	Pro
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Glu	Gly	Asn	Ala	Cys	Ser	Leu	Thr	Asp	Ser	Thr	Ala	Glu	Glu	His	Val
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Leu	Ala	Leu	Val	Glu	His	Ala	Ala	Asp	Glu	Ala	Arg	Asp	Arg	Ile	Asn
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Arg	Phe	Leu	Pro	Gly	Gly	Lys	Met	Gly	Tyr	Leu	Lys	Arg	Asn	Gly	Asp
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Gly	Ser	Leu	Leu	Tyr	Ser	Val	Val	Asn	Thr	Ala	Glu	Pro	Asn	Ala	Asp
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Glu	Glu	Glu	Thr	His	Pro	Val	Thr								
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&lt;210&gt; 3089

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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600

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722

&lt;210&gt; 3090

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 <212> PRT  
 <213> Homo sapiens

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 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly  
 35 40 45  
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser  
 50 55 60  
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly  
 65 70 75 80  
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys  
 85 90 95  
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu  
 100 105 110  
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser  
 115 120 125  
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn  
 130 135 140  
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met  
 145 150 155 160  
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His  
 165 170 175  
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val  
 180 185 190  
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser  
 195 200 205  
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 <212> DNA  
 <213> Homo sapiens

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 240  
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 <213> Homo sapiens

<400> 3092  
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 35 40 45  
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly  
 50 55 60  
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln  
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 Phe Pro Ser Ala Pro Phe Thr Arg  
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<210> 3093  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

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<211> 179  
 <212> PRT  
 <213> Homo sapiens

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 Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe  
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 Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly  
 65 70 75 80  
 Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu  
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 Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr  
 100 105 110  
 Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr  
 115 120 125  
 Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile  
 130 135 140  
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 <212> DNA  
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 <212> PRT  
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 35 40 45  
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu  
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 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp  
 65 70 75 80  
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 85 90 95  
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val  
 100 105 110  
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln  
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&lt;210&gt; 3098

&lt;211&gt; 1359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3098

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Gly	Pro	Ser	Arg	Gly	Ser	Gly	Gly	Gly	Gly	Arg	Gly	Gly	Leu	Arg	Ala
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Asp	Gly	Arg	Ala	Pro	Gly	Leu	Arg	Gly	Leu	Gly	Ala	Ala	Pro	His	Cys
	50					55				60					
Pro	Ala	Gly	Leu	Gly	Pro	Gly	Ala	Met	Ser	Gly	Gly	Gly	Gly	Gly	Gly

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Gly	Ser	Ala	Pro	Ser	Arg	Phe	Ala	Asp	Tyr	Phe	Val	Ile	Cys	Gly
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Asp	Thr	Glu	Thr	Gly	Leu	Glu	Pro	Asp	Glu	Leu	Ser	Ala	Leu	Cys
			100					105					110	Gln
Tyr	Ile	Gln	Ala	Ser	Lys	Ala	Arg	Asp	Gly	Ala	Ser	Pro	Phe	Ile
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Ser	Thr	Thr	Glu	Gly	Glu	Asn	Phe	Glu	Gln	Thr	Pro	Leu	Arg	Arg
		130				135					140			Thr
Phe	Lys	Ser	Lys	Val	Leu	Ala	Arg	Tyr	Pro	Glu	Asn	Val	Glu	Trp
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Pro	Phe	Asp	Gln	Asp	Ala	Val	Gly	Met	Leu	Cys	Met	Pro	Lys	Gly
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Ala	Phe	Lys	Thr	Gln	Ala	Asp	Pro	Arg	Glu	Pro	Gln	Phe	His	Ala
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Ile	Ile	Thr	Arg	Glu	Asp	Gly	Ser	Arg	Thr	Phe	Gly	Phe	Ala	Leu
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Phe	Tyr	Glu	Glu	Val	Thr	Ser	Lys	Gln	Ile	Cys	Ser	Ala	Met	Gln
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Leu	Tyr	His	Met	His	Asn	Ala	Glu	Tyr	Asp	Val	Leu	His	Ala	Pro
225					230					235				240
Ala	Asp	Asp	Arg	Asp	Gln	Ser	Ser	Met	Glu	Asp	Gly	Glu	Asp	Thr
			245						250					255
Val	Thr	Lys	Leu	Gln	Arg	Phe	Asn	Ser	Tyr	Asp	Ile	Ser	Arg	Asp
		260					265						270	Thr
Leu	Tyr	Val	Ser	Lys	Cys	Ile	Cys	Leu	Ile	Thr	Pro	Met	Ser	Phe
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Lys	Ala	Cys	Arg	Ser	Val	Pro	Gly	Gln	Leu	His	Gln	Ala	Val	Thr
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Tyr	Glu	Val	Pro	Leu	Pro	Pro	Pro	Gly	Arg	Ser	Leu	Lys	Phe	Ser
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Val	Tyr	Trp	Pro	Ile	Ile	Cys	Gln	Arg	Pro	Ser	Thr	Asn	Glu	Leu
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Leu	Phe	Asp	Phe	Pro	Val	Lys	Glu	Val	Phe	Glu	Leu	Leu	Gly	Val
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Asn	Val	Phe	Gln	Leu	Phe	Thr	Cys	Ala	Leu	Leu	Glu	Phe	Gln	Ile
		370				375					380			Leu
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Pro	Gln	Glu	Ala	Asn	Leu	Cys	Phe	Val	Asp	Ile	Asp	Asn	His	Phe
		450				455					460			Ile
Glu	Leu	Pro	Glu	Asp	Leu	Pro	Gln	Phe	Pro	Asn	Lys	Leu	Glu	Phe
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Gln	Glu	Val	Ser	Glu	Ile	Leu	Met	Ala	Phe	Gly	Ile	Pro	Pro	Glu
			485						490					Gly
Asn	Leu	His	Cys	Ser	Glu	Ser	Ala	Ser	Lys	Leu	Lys	Arg	Leu	Arg
														Ala

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545	550	555
Arg Glu Asp Pro Ser Ser Asn Lys Asp Leu Lys Val Gln Cys Asp Glu		
565	570	575
Glu Glu Leu Arg Ile Tyr Gln Leu Asn Ile Gln Ile Arg Glu Val Phe		
580	585	590
Ala Asn Arg Phe Thr Gln Met Phe Ala Asp Tyr Glu Val Phe Val Ile		
595	600	605
Gln Pro Ser Gln Asp Lys Glu Ser Trp Phe Thr Asn Arg Glu Gln Met		
610	615	620
Gln Asn Phe Asp Lys Ala Ser Phe Leu Ser Asp Gln Pro Glu Pro Tyr		
625	630	635
Leu Pro Phe Leu Ser Arg Phe Leu Glu Thr Gln Met Phe Ala Phe Phe		
645	650	655
Ile Asp Asn Lys Ile Met Cys His Asp Asp Asp Asp Lys Asp Pro Val		
660	665	670
Leu Arg Val Phe Asp Ser Arg Val Asp Lys Ile Arg Leu Leu Asn Val		
675	680	685
Arg Thr Pro Thr Leu Arg Thr Ser Met Tyr Gln Lys Cys Thr Thr Val		
690	695	700
Asp Glu Ala Glu Lys Ala Ile Glu Leu Arg Leu Ala Lys Ile Asp His		
705	710	715
Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln Gly Lys		
725	730	735
Tyr Glu Pro Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu Cys Thr		
740	745	750
Gly Pro Ala Ser Asn Lys Trp Thr Lys Arg Asn Ala Pro Ala Gln Trp		
755	760	765
Arg Arg Lys Asp Arg Gln Lys Gln His Thr Glu His Leu Arg Leu Asp		
770	775	780
Asn Asp Gln Arg Glu Lys Tyr Ile Gln Glu Ala Arg Thr Met Gly Ser		
785	790	795
Thr Ile Arg Gln Pro Lys Leu Ser Asn Leu Ser Pro Ser Val Ile Ala		
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Gln Thr Asn Trp Lys Phe Val Glu Gly Leu Leu Lys Glu Cys Arg Asn		
820	825	830
Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly Arg Glu Ala Val Glu		
835	840	845
Leu Gly His Gly Glu Val Asn Ile Thr Gly Val Glu Glu Asn Thr Leu		
850	855	860
Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His Gly Leu		
865	870	875
Gln Val Lys Gln Gly Lys Ser Ala Leu Trp Ser His Leu Leu His Tyr		
885	890	895
Gln Asp Asn Arg Gln Arg Lys Leu Thr Ser Gly Ser Leu Ser Thr Ser		
900	905	910
Gly Ile Leu Leu Asp Ser Glu Arg Arg Lys Ser Asp Ala Ser Ser Leu		
915	920	925
Met Pro Pro Leu Arg Ile Ser Leu Ile Gln Asp Met Arg His Ile Gln		

930	935	940
Asn Ile Gly Glu Ile Lys Thr Asp Val Gly Lys Ala Arg Ala Trp Val		
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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
	965	970
Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
	995	1000
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
	1010	1015
Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		1020
1025	1030	1035
Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1040
	1045	1050
Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1055
	1060	1065
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1070
	1075	1080
Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		1085
	1090	1095
Asn Glu Ile Thr Gly His Thr Tyr Lys Phe Pro Cys Gly Arg Trp Leu		1100
1105	1110	1115
Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1120
	1125	1130
Leu Leu Thr Ser Gln Pro Glu Val Asp Glu Arg Pro Cys Arg Thr Pro		1135
	1140	1145
Pro Leu Gln Gln Ser Pro Ser Val Ile Arg Arg Leu Val Thr Ile Ser		1150
	1155	1160
Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		1165
	1170	1175
Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		1180
1185	1190	1195
Glu Arg Gly Ser Leu Thr Leu Leu Leu Cys Gly Glu Cys Gly Leu Val		1200
	1205	1210
Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		1215
	1220	1225
Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		1230
	1235	1240
Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
	1250	1255
Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		1260
1265	1270	1275
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1280
	1285	1290
Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
	1300	1305
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
	1315	1320
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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Phe Asn Ile Thr Leu Glu Thr Ser Leu Val Lys Gly Ile Asp Ile		1340
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 <211> 1001  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
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 780  
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 <211> 159  
 <212> PRT  
 <213> Homo sapiens

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 Phe Thr Leu Pro Phe Trp Ala Val Asn Ala Val His Gly Trp Val Leu  
 35 40 45  
 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

50	55	60
Val Ser Gly Met Gln Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val		
65	70	75
Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
	115	120
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
	130	135
Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met Gly Val		140
145	150	155

<210> 3101  
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 <212> DNA  
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 120  
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 180  
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 240  
 cccggcgggc gcgcgccgcc cgacgacctg gacctgttcc ccacaccoga ccccactac  
 300  
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 360  
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 420  
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 aagacgtctt tgcatatgtg tgatgggccc acgcccacgc ctgaggagct gccgccctgc  
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 1020

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1080  
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1140  
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1380  
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2040  
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2340  
cccacccct ggcaaaaggc tggccatgct ctgttcccag cagcctcgca ggtttccca  
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2520  
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2623

<210> 3102  
 <211> 410  
 <212> PRT  
 <213> Homo sapiens

<400> 3102

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		20						25					30		
Gln	Tyr	Ala	Gly	Pro	Gly	Leu	Ser	Leu	Gly	Ala	Pro	Gly	Gly	Arg	Ala
		35					40					45			
Pro	Pro	Asp	Asp	Leu	Asp	Leu	Phe	Pro	Thr	Pro	Asp	Pro	His	Tyr	Glu
	50					55					60				
Lys	Lys	Tyr	Tyr	Phe	Pro	Val	Arg	Glu	Leu	Glu	Arg	Ser	Leu	Arg	Phe
65					70					75					80
Asp	Met	Lys	Gly	Asp	Asp	Val	Ile	Val	Phe	Leu	His	Ile	Gln	Lys	Thr
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Gly	Gly	Thr	Thr	Phe	Gly	Arg	His	Leu	Val	Gln	Asn	Val	Arg	Leu	Glu
			100					105					110		
Val	Pro	Cys	Asp	Cys	Arg	Pro	Gly	Gln	Lys	Lys	Cys	Thr	Cys	Tyr	Arg
		115					120					125			
Pro	Asn	Arg	Arg	Glu	Thr	Trp	Leu	Phe	Ser	Arg	Phe	Ser	Thr	Gly	Trp
	130					135					140				
Ser	Cys	Gly	Leu	His	Ala	Asp	Trp	Thr	Glu	Leu	Thr	Asn	Cys	Val	Pro
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Gly	Val	Leu	Asp	Arg	Arg	Asp	Ser	Ala	Ala	Leu	Arg	Thr	Pro	Arg	Lys
				165					170					175	
Phe	Tyr	Tyr	Ile	Thr	Leu	Leu	Arg	Asp	Pro	Val	Ser	Arg	Tyr	Leu	Ser
			180					185					190		
Glu	Trp	Arg	His	Val	Gln	Arg	Gly	Ala	Thr	Trp	Lys	Thr	Ser	Leu	His
		195					200					205			
Met	Cys	Asp	Gly	Arg	Thr	Pro	Thr	Pro	Glu	Glu	Leu	Pro	Pro	Cys	Tyr
	210					215					220				
Glu	Gly	Thr	Asp	Trp	Ser	Gly	Cys	Thr	Leu	Gln	Glu	Phe	Met	Asp	Cys
225					230					235				240	
Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
				245					250					255	
Ser	Leu	Val	Gly	Cys	Tyr	Asn	Leu	Ser	Phe	Ile	Pro	Glu	Gly	Lys	Arg
			260				265						270		
Ala	Gln	Leu	Leu	Leu	Glu	Ser	Ala	Lys	Lys	Asn	Leu	Arg	Gly	Met	Ala
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Phe	Phe	Gly	Leu	Thr	Glu	Phe	Gln	Arg	Lys	Thr	Gln	Tyr	Leu	Phe	Glu
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Arg	Thr	Phe	Asn	Leu	Lys	Phe	Ile	Arg	Pro	Phe	Met	Gln	Tyr	Asn	Ser
305					310					315					320
Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
				325					330					335	
Glu	Glu	Leu	Asn	Asp	Leu	Asp	Met	Gln	Leu	Tyr	Asp	Tyr	Ala	Lys	Asp
			340				345						350		
Leu	Phe	Gln	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu
		355				360						365			
Gln	Arg	Leu	Arg	Ser	Arg	Glu	Glu	Arg	Leu	Leu	His	Arg	Ala	Lys	Glu

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Ala Leu Pro Arg Glu Asp	Ala Asp Glu Pro Gly	Arg Val Pro Thr Glu
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Asp Tyr Met Ser His	Ile Ile Glu Lys Trp	400
405	410	

<210> 3103  
 <211> 1228  
 <212> DNA  
 <213> Homo sapiens

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 120  
 caaccccgct gggacactag gccgcggctg ggggaagcgg gagggagaat gttatccccc  
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 50 55 60  
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val  
 65 70 75 80  
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro  
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 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val  
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&lt;210&gt; 3106

&lt;211&gt; 1366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3106

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			20					25					30		
Ala	Met	Leu	His	Cys	Pro	Tyr	Trp	Asn	Thr	Phe	Ser	Leu	Pro	Pro	Tyr
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Pro	Ala	Phe	Ser	Ser	Asp	Ser	Arg	Pro	Phe	Met	Ser	Ser	Ala	Ser	Phe
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Leu	Gly	Ser	Gln	Pro	Cys	Pro	Asp	Thr	Ser	Tyr	Ala	Pro	Val	Ala	Thr
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Ala	Ser	Ser	Leu	Pro	Pro	Lys	Thr	Cys	Asp	Phe	Ala	Gln	Asp	Ser	Ser

2325

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Lys Tyr Leu Cys Ile Ala Ala Lys Val Arg Arg Leu Val Glu Leu Ala		
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Arg Glu Glu Leu Ala Arg Asp Lys Cys Val Val Ile Gly Leu Gln Ser		
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Thr Gly Glu Ala Arg Thr Arg Glu Val Leu Gly Glu Asn Asp Gly His		
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Leu Asn Cys Phe Val Ser Ala Ala Glu Gly Val Phe Leu Ser Leu Ile		
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Gln Lys His Phe Pro Ser Thr Lys Arg Lys Arg Asp Arg Gly Ala Gly		
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Ser Lys Arg Lys Arg Arg Pro Arg Gly Arg Gly Ala Lys Ala Pro Arg		
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Leu Ala Cys Glu Thr Ala Gly Val Ile Arg Ile Ser Asp Asp Ser Ser		
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Thr Glu Ser Asp Pro Gly Leu Asp Ser Asp Phe Asn Ser Ser Pro Glu		
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Ser Leu Val Asp Asp Asp Val Val Ile Val Asp Ala Val Gly Leu Pro		
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Ser Asp Asp Arg Gly Ser Leu Cys Leu Leu Gln Arg Asp Pro His Gly		
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Pro Gly Val Leu Glu Arg Val Glu Arg Leu Lys Gln Asp Leu Leu Asp		
705	710	715
Lys Val Arg Arg Leu Gly Arg Glu Leu Pro Val Asn Thr Leu Asp Glu		
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Leu Ile Asp Gln Leu Gly Gly Pro Gln Arg Val Ala Glu Met Thr Gly		
740	745	750
Arg Lys Gly Arg Val Val Ser Arg Pro Asp Gly Thr Val Ala Phe Glu		
755	760	765
Ser Arg Ala Glu Gln Gly Leu Ser Ile Asp His Val Asn Leu Arg Glu		
770	775	780
Lys Gln Arg Phe Met Ser Gly Glu Lys Leu Val Ala Ile Ile Ser Glu		
785	790	795
Ala Ser Ser Ser Gly Val Ser Leu Gln Ala Asp Arg Arg Val Gln Asn		
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Gln Arg Arg Arg Val His Met Thr Leu Glu Leu Pro Trp Ser Ala Asp		
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Arg Ala Ile Gln Gln Phe Gly Arg Thr His Arg Ser Asn Gln Val Ser		
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Ala Pro Glu Tyr Val Phe Leu Ile Ser Glu Leu Ala Gly Glu Arg Arg		
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Phe Ala Ser Ile Val Ala Lys Arg Leu Glu Ser Leu Gly Ala Leu Thr		
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His Gly Asp Arg Arg Ala Thr Glu Ser Arg Asp Leu Ser Lys Tyr Asn		
885	890	895
Phe Glu Asn Lys Tyr Gly Thr Arg Ala Leu His Cys Val Leu Thr Thr		
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Ile Leu Ser Gln Thr Glu Asn Lys Val Pro Val Pro Gln Gly Tyr Pro		
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Gly Gly Val Pro Thr Phe Phe Arg Asp Met Lys Gln Gly Leu Leu Ser		
930	935	940
Val Gly Ile Gly Gly Arg Glu Ser Arg Asn Gly Cys Leu Asp Val Glu		

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 Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu  
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 Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp  
                                  980                      985                      990  
 His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile  
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 Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln  
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 Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr  
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 Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys  
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 Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys  
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 Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly  
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 Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu  
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 Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu  
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 Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His  
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 Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys  
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 Val Ser Ser Ser Ser Tyr Leu Gln Ile Val Arg Leu Lys Thr Lys Asp  
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 Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln  
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 Ala Pro Ala Leu Gly Cys Pro Ala Pro Pro Ala Pro Arg Pro Leu Ala  
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 Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe  
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 Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro  
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 Gly Ala Gln Ala Pro Leu  
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<212> DNA  
<213> Homo sapiens

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 2102

&lt;210&gt; 3108

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3108

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			20					25					30		
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35					40					45			
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
	50					55					60				
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65					70					75				80	
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
				85					90					95	
Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
			100					105					110		
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
		115					120					125			
Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
	130					135					140				
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
145					150				155					160	
Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
				165				170						175	
Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

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      180      185      190
Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn
      195      200      205
Phe Ile His Leu Ile Leu Glu Ala Leu Val Asp Gly Pro Arg Met Gln
      210      215      220
Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly
      225      230      235      240
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg
      245      250      255
Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val
      260      265      270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn
      275      280      285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg
      290      295      300
Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile
      305      310      315      320
Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu
      325      330      335
Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu
      340      345      350
Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu
      355      360      365
Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu
      370      375      380
Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala
      385      390      395      400
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg
      405      410      415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His
      420      425      430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala
      435      440      445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp
      450      455      460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp
      465      470      475      480
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser
      485      490      495
Pro Arg Leu Asp Leu Thr Gly Ser Ser Gly His Ser Leu Gln Pro Gln
      500      505      510
Pro Arg Asp Glu Leu
      515

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&lt;210&gt; 3109

&lt;211&gt; 959

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3109

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120

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 180  
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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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Trp	His	Cys	Lys	Ile	Asp	Glu	Gly	Ser	Ala	Gly	Leu	Val	Ala	Ser	Cys
			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
				85					90					95	
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100					105					110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
		115					120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130					135					140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
		165				170						175			
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
		180				185						190			
Ile	Thr	Glu	Phe	Gly	His	Pro	Cys	Ser	Pro	Ile	Asn	Asp	Ser	Gln	
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&lt;210&gt; 3111

&lt;211&gt; 1269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3111

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120
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180
aactcaaaaa caggctctgt atgctatata tagtttatcc cttcccgaac aaaatttctg
240
ttatttgggc aaattcttaa accatgggtt aaaccgtaat gggtacaaac cacaacaca
300
tccatccaga gactgaaacc gtttctatcc ggtcagtggc aaaactgttg aaagggcaat
360
agttgaagct gttgggtttt atatagtgtg aactctgata aatattccta ccaggactaa
420
aacacagcac gctttgcggg catggctgac tcacaaaggt tgtaacaaac aagaactact
480
cttcactcga caccatggct cagaggccac cgagaagcac gagtgaactga cagctcctct
540
gcttacaac gaatgaaacc caaagtggat gtcgttctca cagcactgaa agtgcttcag
600
gactcacact gatccaatac taactttctt ccctatttta cacatatttt tctactgtcc
660
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720
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780
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840
tctccttccc agtcacactc ggggtcattt acacgtttct gggatgccct tgctcgtcca
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960
cgaaccttct gccttgacaga tctcccgt tccgccacac tctcgcgtc ggaagcgagc
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1080
tgctggactg tcgtcacacc tetgcgtct tccagtctc tccatggcct cccccggagc
1140
cccgtgtcc tggctcccct tcttccctct gtcttgacca ggtcctttcc cccatctctg
1200

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 gtcaccac  
 1269

<210> 3112  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 3112  
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 Glu Gly Val Arg Met Ser Arg Asp Gly Gly Lys Asp Leu Ala Lys Thr  
 20 25 30  
 Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp  
 35 40 45  
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu  
 50 55 60  
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile  
 65 70 75 80  
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser  
 85 90 95  
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln  
 100 105 110  
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser  
 115 120 125  
 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile  
 130 135 140  
 Pro Tyr Gln Glu Thr Gly Ser  
 145 150

<210> 3113  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ccaaaagggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc  
 180  
 accatcgga cccggaactt gcagaaatat gtgagccgca cttcggttgt gtttgtctcc  
 240  
 atctccttca ttgtctgat gatcatttcc ctgcgatggc tcgtctttta ttacatccag  
 300  
 aggtttcgat atgcaaatgc cagggatagg aaccagcgcc gactggggga tgcagcaaag  
 360  
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 420  
 gattttgaca actgtgcagt ttgtattgaa ggggtacaagc ccaatgacgt tgtccggatc  
 480

ctgccctgcc ggcattcttt ccacaagtcc tgtgttgacc cctggcttct agaccatcgt  
 540  
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<210> 3114  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 3114  
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 Ser Asn Thr Asn Glu Thr Ile Thr Met Pro His Ala Gly Val Glu Asp  
 20 25 30  
 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser  
 35 40 45  
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr  
 50 55 60  
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser  
 65 70 75 80  
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe  
 85 90 95  
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln  
 100 105 110  
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile  
 115 120 125  
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn  
 130 135 140  
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile  
 145 150 155 160  
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu  
 165 170 175  
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala  
 180 185 190  
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp  
 195 200 205  
 Phe Glu  
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<210> 3115  
 <211> 1366  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gcagaaaaga tggaaaaaag gacatgtgca ctctgcccc aagatgtcga atataatgtc  
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca  
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 300  
 tcagtaaaga aagaaatcca gagaggaagg aagttgaaat gcaaattttg tcataaaaga  
 360  
 ggagccaccg tgggatgtga tttaaaaaac tgtaacaaga attaccactt tttctgtgcc  
 420  
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc  
 480  
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaaaaga  
 540  
 aaaagaggaa ggaagaaacc cctctcaggc aatcatgtac agccaccga aacaatgaaa  
 600  
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg  
 660  
 aaagttcctt ttcttaagaa atgcaagnga agcaggactt cttaattact tacttgaaga  
 720  
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc  
 780  
 agactatgaa gaaatcgga gtgcactttt tgactgtaga ttgttcgaag acacatttgt  
 840  
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 960  
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 1020  
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 1080  
 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tcctgttct  
 1140  
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 1200  
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 1260  
 ctttgattct acttacagcc catgatagcc tcttcttaga tataataaat ttggattata  
 1320  
 ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
 1366

&lt;210&gt; 3116

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3116

Met	Glu	Lys	Arg	Thr	Cys	Ala	Leu	Cys	Pro	Lys	Asp	Val	Glu	Tyr	Asn
1				5				10					15		
Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35					40				45				
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50		55		60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr				
65		70		75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys				
	85		90	95
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile				
	100		105	110
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln				
	115		120	125
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro				
	130		135	140
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr				
145		150		155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr				
	165		170	175
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser				
	180		185	190

<210> 3117  
 <211> 1373  
 <212> DNA  
 <213> Homo sapiens

<400> 3117  
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 gcctcagcct ggggggtcac cctgagcccc aaagactgcc aggtgttccg ctcagaccat  
 180  
 ggcagctcca tctcctgtca accacctgcc gaaatccccg gctacctgcc agccgacacc  
 240  
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 300  
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 360  
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 420  
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 660  
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 720  
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 780  
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 840  
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 900

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 960  
 tatcgttggc ttcaggccca aaaagacaag atgttttccc agaatgacac gcgctgtgct  
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 1200  
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 1260  
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 1320  
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 1373

<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

Val	Thr	Leu	Ser	Pro	Lys	Asp	Cys	Gln	Val	Phe	Arg	Ser	Asp	His	Gly
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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
		35					40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
		50				55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75				80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
		115					120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
		130				135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155				160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165					170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
				180				185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
		195				200						205			
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
		210				215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230					235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg



	115		120		125
Leu	Asn	Tyr	Thr	Ala	Tyr
		Tyr	Tyr	Pro	Ser
			Pro	Glu	Asp
				Asn	Ala
	130		135		140

<210> 3121  
 <211> 284  
 <212> DNA  
 <213> Homo sapiens

<400> 3121  
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 120  
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcttgctaat  
 180  
 gaacaaggcc tccccagagt atgaagagaa catgcacaga taccagaagg cagccaagct  
 240  
 cttccgggga agattctctt tattctgggtg gacagtggta tgaa  
 284

<210> 3122  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 3122  
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser  
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 35 40 45  
 Ser Ile Val Pro Leu Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu  
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 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg  
 65 70 75 80  
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val  
 85 90

<210> 3123  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 3123  
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 120  
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc  
 180  
 atcgagtc ccaagttcaa acagaggaag ggggagtcac acggggccta tatccaccgc  
 240

atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat cgggcagcca  
 300  
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 344

<210> 3124  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 3124  
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 Lys Lys Ala Ala Gln Val Thr Phe Arg Lys Thr Leu Glu Lys Glu Ala  
 20 25 30  
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys  
 35 40 45  
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln  
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 65 70 75 80  
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys  
 85 90

<210> 3125  
 <211> 647  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa  
 180  
 ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg  
 240  
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 300  
 atgtggcctc ggcccacgcc agaagccggg caaggtccca agtgccggct cgcccacaag  
 360  
 ctatggctaa gacagaaaaa caaaggaaaa aaagtcctcc ccaaacacac acataagcaa  
 420  
 aaccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact  
 480  
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga  
 540  
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataaccagg  
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<210> 3126

<211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 3126

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Met Lys Leu Asn Ser Trp Tyr Val Ile Phe Ile Phe Phe Arg Ala Pro
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Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu
      20           25           30
His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
      35           40           45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
      50           55           60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
      65           70           75           80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
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Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
      100          105          110
Cys Asp Val Pro
      115

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<210> 3127  
 <211> 2218  
 <212> DNA  
 <213> Homo sapiens

<400> 3127

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120
actttggaga aattgaagag cctagggctt tttgggctgc aagtcccaga agaatatggt
180
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240
tccatcactg tgaccctggc agcgcaccag gctattggcc tcaaggggat catcttggct
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360
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420
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480
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540
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600
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660
aacaccaaga tacctgtgga aaacatcctt ggagaggtcg gagatggggt taaggtggcc
720
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780

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2218

&lt;210&gt; 3128

&lt;211&gt; 565

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3128

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 Pro Val Glu Lys Phe Phe Thr Glu Glu Val Asp Ser Arg Lys Ile Asp  
 20 25 30  
 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu  
 35 40 45  
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe  
 50 55 60  
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly  
 65 70 75 80  
 Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly  
 85 90 95  
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys  
 100 105 110  
 Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala  
 115 120 125  
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu  
 130 135 140  
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn  
 145 150 155 160  
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val  
 165 170 175  
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu  
 180 185 190  
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly  
 195 200 205  
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile  
 210 215 220  
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala  
 225 230 235 240  
 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala  
 245 250 255  
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr  
 260 265 270  
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu  
 275 280 285  
 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr  
 290 295 300  
 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser  
 305 310 315 320  
 Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln  
 325 330 335  
 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg  
 340 345 350  
 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile  
 355 360 365  
 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly  
 370 375 380  
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys  
 385 390 395 400  
 Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg  
 405 410 415  
 Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

			420					425					430				
Val	Val	His	Pro	Ser	Leu	Ala	Asp	Ser	Ala	Asn	Lys	Phe	Glu	Glu	Asn		
		435					440					445					
Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val	Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly		
	450					455					460						
Lys	Thr	Ile	Met	Glu	Glu	Gln	Leu	Val	Leu	Lys	Arg	Val	Ala	Asn	Ile		
465					470					475					480		
Leu	Ile	Asn	Leu	Tyr	Gly	Met	Thr	Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg		
			485						490						495		
Ser	Ile	Arg	Ile	Gly	Leu	Arg	Asn	His	Asp	His	Glu	Val	Leu	Leu	Ala		
			500					505									
Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser		
		515					520					525					
Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys		
	530					535					540						
Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro		
545					550					555					560		
Leu	Asp	Arg	Thr	Cys													
				565													

&lt;210&gt; 3129

&lt;211&gt; 1964

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3129

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840

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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			20					25					30		
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35					40				45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
	50					55					60				
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65					70					75					80
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
			100					105					110		
Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
	130					135					140				
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
145				150						155					160
Gln	Ile	His	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	
			165					170					175		
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
			180					185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
	195						200					205			
Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
	210					215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
225				230					235					240	
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
			245					250					255		
Leu	Leu	Lys	Glu	Asn	Arg	Glu	Ser	Lys	Arg	Lys	Thr	Pro	Lys	Val	Glu
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Leu

<210> 3131  
 <211> 1544  
 <212> DNA  
 <213> Homo sapiens

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 1140  
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 1320  
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 1380  
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 1440  
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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

Met	Pro	His	Arg	Lys	Glu	Arg	Pro	Ser	Gly	Ser	Ser	Leu	His	Thr	His
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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
			35				40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
			50			55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70				75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
				85				90						95	
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
			100					105					110		
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

115	120	125
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Pro Met Leu Leu Glu Met Glu Arg Trp Lys Gln Asp Arg Glu Thr Gly		
145	150	155
Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp		
165	170	175
Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu		
180	185	190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly		
195	200	205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr		
210	215	220
Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly		
225	230	235
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe		
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&lt;212&gt; DNA

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&lt;210&gt; 3134

&lt;211&gt; 51

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3134

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<400> 3136

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2357

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<210> 3140  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 3140  
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 Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe  
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 Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro  
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 Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

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Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu	Arg	Phe
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		115													

&lt;210&gt; 3141

&lt;211&gt; 1815

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3141

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<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
		35					40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
	50					55					60				
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65				70					75					80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
			85						90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
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Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
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Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
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Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150						155				160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
			165						170					175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180				185						190		
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

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Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His	Ile Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn Gln	Leu Val Ser Thr Ile	Met Ser Ala Ser Thr
225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn	Asn Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg Leu	His Phe Leu Met Thr Gly
260	265	270
Tyr Thr Pro Leu Thr	Thr Asp Gln Ser Val	Ala Ser Val Arg Lys Thr
275	280	285
Thr Val Leu Asp Val	Met Arg Arg Leu Leu	Gln Pro Lys Asn Val Met
290	295	300
Val Ser Thr Gly Arg	Asp Arg Gln Thr Asn	His Cys Tyr Ile Ala Ile
305	310	315
Leu Asn Ile Ile Gln	Gly Glu Val Asp Pro	Thr Gln Val His Lys Ser
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Leu Gln Arg Ile Arg	Glu Arg Lys Leu Ala	Asn Phe Ile Pro Trp Gly
340	345	350
Pro Ala Ser Ile Gln	Val Ala Leu Ser Arg	Lys Ser Pro Tyr Leu Pro
355	360	365
Ser Ala His Arg Val	Ser Gly Leu Met Met	Ala Asn His Thr Ser Ile
370	375	380
Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln	Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys	Glu Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu	Ile Val Gln Gln Leu Ile
420	425	430
Asp Glu Tyr His Ala	Ala Thr Arg Pro Asp	Tyr Ile Ser Trp Gly Thr
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Gln Glu Gln		
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&lt;210&gt; 3143

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

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&lt;210&gt; 3144

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 <213> Homo sapiens

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 35 40 45  
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 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro  
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 <211> 436  
 <212> DNA  
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<400> 3146  
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 20 25 30  
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 35 40 45  
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

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Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
	100	105	110	
Pro Asn Val Val Ser	Ser Arg Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
	115	120	125	
Gly Thr Ser				
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&lt;210&gt; 3147

&lt;211&gt; 3106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			20					25					30				
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys		
		35					40					45					
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala		
		50				55					60						
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu		
65					70				75					80			
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro		
			85					90					95				
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp		
			100					105					110				
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr		
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Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu			
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Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro		
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Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys		
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Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala		
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Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro		
	210				215						220						
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val		
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Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr		
			245					250					255				
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro		

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Leu Leu Ile Pro Met Tyr Phe Gln Tyr Gln Ile Ile Met Thr Met Ile		
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Val His Lys Asn Trp Val Asp Leu Ala Trp Ala Val Ser Tyr Tyr Ile		
290	295	300
Arg Phe Phe Ile Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly Ala Leu		
305	310	315
Leu Phe Leu Asn Phe Ile Arg Phe Leu Glu Ser His Trp Phe Val Trp		
325	330	335
Val Thr Gln Met Asn His Ile Val Met Glu Ile Asp Gln Glu Ala Tyr		
340	345	350
Arg Asp Trp Phe Ser Ser Gln Leu Thr Ala Thr Cys Asn Val Glu Gln		
355	360	365
Ser Phe Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu		
370	375	380
His His Leu Phe Pro Thr Met Pro Arg His Asn Leu His Lys Ile Ala		
385	390	395
Pro Leu Val Lys Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Glu		
405	410	415
Lys Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu Lys Lys		
420	425	430
Ser Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys		
435	440	

&lt;210&gt; 3149

&lt;211&gt; 1006

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3149

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<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
		35					40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90				95		
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115					120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170					175		
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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Pro	Leu	Ala	Pro	Ser	Pro	Thr	Gly	Pro							
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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 120

cctgggcctc tcggtggagc agggaccoga accggtgcc atccagtccg gtgccatctg  
180  
aagccccctt cccagaaaat gagccacaga gcaagctgac cccagcgaca cagcccccca  
240  
gcctactat atttccgttc ctatcaaaaa atggatgact cggagacagg tttcaatctg  
300  
aaagtctgcc tggtcagttt caagcagtgt ctcgatgaga aggaagaggt cttgctggac  
360  
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420  
tcattcatct ccaaggacgt ggtctccaag ctgcggatca tggagcgctt caggggcggc  
480  
ccgcagagcg agcactaccg cagcctgcag gccatggtgg cccacgagct gagcaaccgg  
540  
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600  
ctgcaccgcg ccctgcactg gctgcagctg ttcttgaggg gcctgcgtac cagccccgag  
660  
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720  
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780  
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960  
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1080  
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1140  
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cagagcaggc aggggtgggg gccgggcccc caagagcccc aaaggtcgcc accccctagc  
1260  
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1380  
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1680  
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1740

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 1800  
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 1860  
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 1920  
 acctcgggggt ggcagagggga cggccccccac ggcccagcag acatgcgagc ttccagagtg  
 1980  
 caatctatgt gatgtcttcc aacgttaata aatcacacag cctcccagga gggagacgct  
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 2079

<210> 3152  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens

<400> 3152  
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 Phe Lys Gln Cys Leu Asp Glu Lys Glu Glu Val Leu Leu Asp Pro Tyr  
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 Ile Ala Ser Trp Lys Gly Leu Val Arg Phe Leu Asn Ser Leu Gly Thr  
 35 40 45  
 Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met  
 50 55 60  
 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln  
 65 70 75 80  
 Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly  
 85 90 95  
 Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His  
 100 105 110  
 Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser  
 115 120 125  
 Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala  
 130 135 140  
 Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val  
 145 150 155 160  
 Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn  
 165 170 175  
 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro  
 180 185 190  
 Phe Ile Gln Arg Val Tyr Asn Val Ser Gln Lys Leu Tyr Ala Glu His  
 195 200 205  
 Ser Leu Leu Asp Leu Pro  
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<210> 3153  
 <211> 1498  
 <212> DNA  
 <213> Homo sapiens

<400> 3153

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120  
cccactcagc aaccaacaag gaggaaagcc cccgcagtgc tcggccagtg ccgcgccatc  
180  
gccaccaggg agcgccccgc gcgcgggtcca cgtggcagag gtcgcgccct cgcggcgcgg  
240  
ggaggagccg cacgccacag tggcaggtcc caggccgtca ctccgagctc tcgccttccg  
300  
ggccgctgtc cggcgtgggc gggaggaggg gtctccggcg cgagcgcttg acccggcgcg  
360  
agggctgcag cagcctccgc ttcagcacag cagccactgt gtcctggctg tccgctgtgg  
420  
gccccagta gatgctctcc ccgcgtcgga agttttctgtg cagccgtgtg cagagcggtg  
480  
ccagggtgag cagcaccagc aggaaggtca gggccatggc agcccaggcg gcctcttcag  
540  
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600  
ctgacttgaa cagacacagc cccctgggct gccttgcccg ttgggcacct gagcctctgt  
660  
cctggagctg gcattgcctc caggcgcccc cggcagcagg gagacagtgg gcacagatgg  
720  
ggcattactc tccctaccag ggattcccgc catggactgc ttggccttca agtcacctgg  
780  
ggaagcagag ggaaacctca gggctgagcg agtgggctgg ggaccaaggg cagcccgcag  
840  
cctccgcctc ttggcaccac tagaagaggg ctgcctgggc ccttgagatg tcacctctgt  
900  
gccagggggc cgccagctcc gcaaaagcaa aggccaaaac cccgggcctg cacacacctc  
960  
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ttcacagtag atccatgcct tcttcttctc ctgcttctc ctccgcctcc tcatcagcca  
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1260  
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1320  
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1380  
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1498

&lt;210&gt; 3154

&lt;211&gt; 65

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3154

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Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
          20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50           55           60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaaattct ggaaattttg aagaaagggg aggcatttgt tttagatatt
300
gacttggatt ttttttctagt caagaatccc ttcaaaaaaa tgttcactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct
480
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540
gaatcactag t
551

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Met Val Lys Pro Tyr Lys Leu Cys Asn Asn Gln Glu Glu Asn Asp Ala
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Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
          20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65		70		75
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				80
	85		90	95
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				160
	165		170	175
Ser Leu				

&lt;210&gt; 3157

&lt;211&gt; 903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

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120
tctctggtag gacttctgat ggtgggggca cctccccagg tcacagtcca ggtgcagggc
180
caggaggtcc tatcagagaa gatggagccc tccagtttcc agcccctacc tgaaactgag
240
cctccaactc cagagcctgg gcccaagaca cctcctagga ctatgcagga atcaccactg
300
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360
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420
ctgtgatttc agagatgtgg gaccgtgctg gaccagatct tccccacag caagactggg
480
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660
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720
gaacaggacc ccacggacga ggatccctgc cgggggtgtg gccctgctct ggtcaccacc
780
cgctggcgct cccccagggg ccggagccgg ggccgccccca gcaactggggg cgggggtggtt
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900

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cac  
903

<210> 3158  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 3158  
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20 25 30  
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr  
35 40 45  
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val  
50 55 60  
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln  
65 70 75 80  
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln  
85 90

<210> 3159  
<211> 2408  
<212> DNA  
<213> Homo sapiens

<400> 3159  
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ctcgttcgtg tccccgcccc tcgctcctgc agctactgct cagaaacgct ggggcgcccc  
120  
ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcagggtcta attttgacg  
180  
ctttgcctgc catttcttcc aggttgaggg agccgcagag gcggaggctc gcgtattcct  
240  
gcagtcagca cccacgtcgc ccccggaagc tcggtgctca ggcccttcgc gagcggggct  
300  
ctccgtctgc ggcccttctg gaaggctctg ggccggtgca gaggcgggcc gtccggtttg  
360  
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420  
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480  
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540  
gccactttat tggagaaact tttggaaaaa tacatggatg aggatgggtga gtgggtggata  
600  
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cataataaat tacgaagtca ggtgtatcca acagcctcta atatggagta tatgacatgg  
720  
gatgtagagc tggaaagatc tgcagaatcc tgggctgaaa gttgcttggt ggaacatgga  
780

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900  
gaacatgaat gcaacccata ttgtccattc aggtgttctg gccctgtatg tacacattat  
960  
acacaggtcg tgtgggcaac tagtaacaga atcggttgtg ccattaattt gtgtcataac  
1020  
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1080  
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1140  
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1200  
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1260  
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1320  
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1380  
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1440  
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1500  
gatggtggct gggtagatat cactagacaa ggaagaaagc attatttcat caagtccaat  
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2040  
tacagagtac atcaactatt ttcagcccaa aaagggtgcca aatgcatata aatcttgata  
2100  
aacaagtct ataaaataaa acatgggaca ttagcttttg gaaaagtaat gaaaatataa  
2160  
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2220  
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2280  
taataaaatg aatctaaaca ttgaatgtga atggccctca gaaaatcatc tagtgcattt  
2340  
aaaaataatc gactctaaaa ctgaaagaaa ccttatcaca ttttccccag ttcaatgcta  
2400

tgccatta  
2408

<210> 3160  
<211> 431  
<212> PRT  
<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75				80	
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85					90					95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
			100					105					110		
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
		115					120					125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
		130				135						140			
Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
145					150					155					160
Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
				165					170					175	
Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
			180					185					190		
Gly	Gln	Ile	Trp	Pro	Lys	Ala	Val	Tyr	Leu	Val	Cys	Asn	Tyr	Ser	Pro
		195					200					205			
Lys	Gly	Asn	Trp	Trp	Gly	His	Ala	Pro	Tyr	Lys	His	Gly	Arg	Pro	Cys
	210					215						220			
Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys
225					230					235					240
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
				245					250					255	
Asn	Glu	Ile	Glu	Arg	Gln	Gln	Ser	Gln	Val	His	Asp	Thr	His	Val	Arg
			260					265					270		
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
		275					280					285			
Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
	290					295					300				
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
305					310					315					320
Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
				325					330					335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
		340						345					350		
Val	Asp	Ile	Thr	Arg	Gln	Gly	Arg	Lys	His	Tyr	Phe	Ile	Lys	Ser	Asn

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<210> 3161
<211> 1197
<212> DNA
<213> Homo sapiens
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2376

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1197

<210> 3162

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3162

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Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
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Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
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Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
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Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
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Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
		180						185					190		
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His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro
225					230					235					240
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				245					250					255	
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			260					265					270		
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
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Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
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Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
				325					330					335	
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
		340						345					350		
Pro	Asp	Asn	Gln	Val	His	Phe	Glu	Gly	Tyr	Gln	Val	Ser	Asn	Gln	Cys

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 Val Cys  
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<210> 3163  
 <211> 1075  
 <212> DNA  
 <213> Homo sapiens

<400> 3163  
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 180  
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 780  
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 960  
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<210> 3164  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 3164

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His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
          20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
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&lt;210&gt; 3165

&lt;211&gt; 2413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

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120
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180
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240
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720
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900
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1020

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2400  
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2413

&lt;210&gt; 3166

&lt;211&gt; 717

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3166

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 20          25          30
Ser Leu Pro Leu Ser Ala His Gly Ile Val Val Ala Trp Leu Ser Arg
 35          40          45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
 50          55          60
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
 65          70          75          80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85          90          95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
 100         105         110
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
 115         120         125
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
 130         135         140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
 145         150         155         160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
 165         170         175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
 180         185         190
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu
 195         200         205
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
 210         215         220
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
 225         230         235         240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
 245         250         255
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
 260         265         270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
 275         280         285
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
 290         295         300
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
 305         310         315         320
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
 325         330         335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
 340         345         350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
 355         360         365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
 370         375         380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
 385         390         395         400
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr
 405         410         415
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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<210> 3167
<211> 2730
<212> DNA
<213> Homo sapiens
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420  
gataaaatta aaacaggcctt ggctgggtctt gaaatcggca tcttagtgaa caacgtggga  
480  
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540  
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600  
atgggtggaaa gatccaaagg ggctattctg aacatttcat ctggcagtgg catgctccct  
660  
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720  
ctccatgagg agtataggag caagggcgctc tttgtgcaga gtgtcctgcc atacttcgta  
780  
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840  
gtgaagtctg caattaaaac agtcggcctg caatcccgaa ccaatggata cctgatccat  
900  
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960  
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1020  
ataactgcat tgtaacttgg ccagatgctc cagcatatgc acgttcactg caaagcacc  
1080  
tactggtttt gaaaatctga ccttgtcatt tcaatagtta ttaacatgac taaatattat  
1140  
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1920

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 2730

&lt;210&gt; 3168

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3168

Met	Glu	Ser	Ala	Leu	Pro	Ala	Ala	Gly	Phe	Leu	Tyr	Trp	Val	Gly	Ala
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Gly	Thr	Val	Ala	Tyr	Leu	Ala	Leu	Arg	Ile	Ser	Tyr	Ser	Leu	Phe	Thr
			20					25					30		
Ala	Leu	Arg	Val	Trp	Gly	Val	Gly	Asn	Glu	Ala	Gly	Val	Gly	Pro	Gly
		35					40					45			
Leu	Gly	Glu	Trp	Ala	Val	Val	Thr	Gly	Ser	Thr	Asp	Gly	Ile	Gly	Lys
	50					55					60				
Ser	Tyr	Ala	Glu	Glu	Leu	Ala	Lys	His	Gly	Met	Lys	Val	Val	Leu	Ile
65					70					75				80	
Ser	Arg	Ser	Lys	Asp	Lys	Leu	Asp	Gln	Val	Ser	Ser	Glu	Ile	Lys	Glu
			85					90						95	
Lys	Phe	Lys	Val	Glu	Thr	Arg	Thr	Ile	Ala	Val	Asp	Phe	Ala	Ser	Glu
			100					105					110		
Asp	Ile	Tyr	Asp	Lys	Ile	Lys	Thr	Gly	Leu	Ala	Gly	Leu	Glu	Ile	Gly
	115					120					125				
Ile	Leu	Val	Asn	Asn	Val	Gly	Met	Ser	Tyr	Glu	Tyr	Pro	Glu	Tyr	Phe
	130					135					140				
Leu	Asp	Val	Pro	Asp	Leu	Asp	Asn	Val	Ile	Lys	Lys	Met	Ile	Asn	Ile

145		150		155		160									
Asn	Ile	Leu	Ser	Val	Cys	Lys	Met	Thr	Gln	Leu	Val	Leu	Pro	Gly	Met
		165		170		175									
Val	Glu	Arg	Ser	Lys	Gly	Ala	Ile	Leu	Asn	Ile	Ser	Ser	Gly	Ser	Gly
		180		185		190									
Met	Leu	Pro	Val	Pro	Leu	Leu	Thr	Ile	Tyr	Ser	Ala	Thr	Lys	Thr	Phe
		195		200		205									
Val	Asp	Phe	Phe	Ser	Gln	Cys	Leu	His	Glu	Glu	Tyr	Arg	Ser	Lys	Gly
	210			215		220									
Val	Phe	Val	Gln	Ser	Val	Leu	Pro	Tyr	Phe	Val	Ala	Thr	Lys	Leu	Ala
	225			230		235									
Lys	Ile	Arg	Lys	Pro	Thr	Leu	Asp	Lys	Pro	Ser	Pro	Glu	Thr	Phe	Val
		245		250		255									
Lys	Ser	Ala	Ile	Lys	Thr	Val	Gly	Leu	Gln	Ser	Arg	Thr	Asn	Gly	Tyr
		260		265		270									
Leu	Ile	His	Ala	Leu	Met	Gly	Ser	Ile	Ile	Ser	Asn	Leu	Pro	Ser	Trp
	275			280		285									
Ile	Tyr	Leu	Lys	Ile	Val	Met	Asn	Met	Asn	Lys	Ser	Thr	Arg	Ala	His
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Tyr	Leu	Lys	Lys	Thr	Lys	Lys	Asn								
	305			310											

&lt;210&gt; 3169

&lt;211&gt; 5945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3169

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180
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240
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420
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780

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 Pro Glu Gln Gln Met Ile Ala Asp Ile His Cys Met Ile Ala Ala Gly  
 50 55 60  
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 Gly Val Arg Val Asp Val Lys Asp Trp Asp Gly Trp Glu Pro Leu His  
 100 105 110  
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 Asp Leu Cys Glu Glu Glu Glu Phe Lys Val Leu Leu Leu Glu Leu Lys  
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 165 170 175  
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 Ser Thr Tyr Asn Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn  
 225 230 235 240  
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 Pro Thr Lys Ile Pro Arg Gly Glu Leu Asp Met Pro Val Glu Asn Gly  
 260 265 270  
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Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		
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Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		
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Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		
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Met Glu Glu Lys Val His Gly Cys Cys Arg Ile Ser		
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&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3171

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&lt;210&gt; 3172

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3172

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Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
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Arg Tyr Ser Val Ser Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
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Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
          85           90           95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
          100           105           110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
          115           120           125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
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Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
145           150           155           160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
          165           170           175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
          180           185           190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
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&lt;210&gt; 3173

&lt;211&gt; 573

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3173

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 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu  
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 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser  
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<400> 3178

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Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
 35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
 50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
 65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
 85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
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Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
260          265          270
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<210> 3179  
 <211> 3447  
 <212> DNA  
 <213> Homo sapiens

<400> 3179

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<210> 3180  
<211> 127  
<212> PRT  
<213> Homo sapiens

<400> 3180  
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Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe  
35 40 45  
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn  
50 55 60  
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala  
65 70 75 80  
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe  
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Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln  
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<210> 3181  
<211> 287  
<212> DNA  
<213> Homo sapiens

<400> 3181  
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<210> 3182  
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<212> PRT  
<213> Homo sapiens

<400> 3182  
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20 25 30  
Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

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Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln				
	50					55					60								
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys				
65					70					75					80				
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro					
				85					90					95					

&lt;210&gt; 3183

&lt;211&gt; 1457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3183

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120
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180
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240
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360
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420
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720
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1200

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 aaaaaaaaaa aaaaaaa  
 1457

<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

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		20						25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg	
		35					40					45			
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
50						55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65					70				75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90					95		
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105				110			
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
		115					120				125				
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
		130				135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 120  
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 180  
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa  
 240  
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 300  
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 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa  
 420  
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 480  
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 600  
 aggaggagtg ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca  
 660  
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 720  
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 780  
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
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His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35					40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
	50				55					60					
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65				70					75					80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys
	100							105					110		

&lt;210&gt; 3187

&lt;211&gt; 860

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3187

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120
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420
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780
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840
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860

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&lt;210&gt; 3188

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3188

Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp
1				5				10					15		
Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro
		20					25					30			
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu
		35				40					45				
Val	Val	Lys	Lys	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg

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      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

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&lt;210&gt; 3189

&lt;211&gt; 440

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3189

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120
gactccccct ctggggccagt gctgccctgc tttctctgtc tctttcaggga tgtgctgtcc
180
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240
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360
caggctctgc tgggcaggat tatatgttac ctggtcagag cagggtggcag ctcttaggag
420
cctccccctat ggccccctgcc
440

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&lt;210&gt; 3190

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

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 120  
 aacagcagga caatccacac ttccgtagcc tcctgggggc ggccgccgag ccagcccggg  
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<210> 3192  
 <211> 84  
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 <213> Homo sapiens

<400> 3192  
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 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser  
 35 40 45  
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 <213> Homo sapiens

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<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35					40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75				80	
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe
				85					90				95		
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
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Lys	Pro	Leu	Asp												
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<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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<210> 3196  
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 Ala Ile Arg Lys Pro Gln Thr Pro Thr Ser Leu Ala Gly Ser Ala Lys  
 35 40 45  
 Gly Gly Gln Asp Gly Ser Gln Arg Ser Ser Ile His Phe Glu Thr Glu  
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 Glu Ala Asn Arg Ser Phe Leu Ser Gly Ile Lys Thr Ile Leu Lys Lys  
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 Ser Pro Glu Pro Lys Glu Asp Pro Ala His Leu Ser Asp Ser Ser Ser  
 85 90 95  
 Ser Ser Gly Ser Ile Val Ser Phe Lys Ser Ala Asp Ser Ile Lys Ser  
 100 105 110  
 Arg Pro Gly Ile Pro Arg Leu Ala Gly Asp Gly Gly Glu Arg Thr Ser  
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<210> 3197  
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&lt;210&gt; 3198

&lt;211&gt; 833

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3198

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Lys	Pro	Trp	Ser	Ser	Trp	Ile	Asp	Ala	Ala	Lys	Leu	His	Cys	Ser	Asp
			20					25					30		
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
		35					40					45			
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
	50				55						60				
Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90					95	
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
		115				120						125			
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
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Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
			165					170						175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
		180						185					190		
Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

2411

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    645                                  650                                  655  
 Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val  
    660                                  665                                  670  
 His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro  
    675                                  680                                  685  
 Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln  
    690                                  695                                  700  
 Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro  
 705                                  710                                  715                                  720  
 Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala  
    725                                  730                                  735  
 Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg  
    740                                  745                                  750  
 Lys Asn Ser Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro  
    755                                  760                                  765  
 Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro  
    770                                  775                                  780  
 Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn  
 785                                  790                                  795                                  800  
 Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro  
    805                                  810                                  815  
 Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu  
    820                                  825                                  830  
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

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Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
			35				40					45			
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
			50				55				60				
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
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Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
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<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

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<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

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Lys Gly His Ala Ala Ala Gly Val Ser Thr Ala Lys Pro Thr Ala Phe			
	20	25	30
Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala			
	35	40	45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
	50	55	60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
65	70	75	80
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
	85	90	95
Gly Ser Gln Arg Gln Pro Leu Leu Thr Leu Arg Val Pro Gly Ala Ser			
	100	105	110
Gln Glu Gly Arg			
115			

&lt;210&gt; 3203

&lt;211&gt; 1906

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3203

```

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120
cacggtggca gcattgagag ttggacaccc gggtccttga agtgatctct agggcccagc
180
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240
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840
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960

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ttacaccagc acctggacct ttccagcagt gagaagttcc atgaactcca ccgtgacttg  
 1020  
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 1080  
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 1140  
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 1860  
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 1906

&lt;210&gt; 3204

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3204

Met	Ala	Pro	Glu	Glu	Asp	Ala	Gly	Gly	Glu	Ala	Leu	Gly	Gly	Ser	Phe
1				5					10					15	
Trp	Glu	Ala	Gly	Asn	Tyr	Arg	Arg	Thr	Val	Gln	Arg	Val	Glu	Asp	Gly
			20					25					30		
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
		35				40					45				
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
	50					55				60					
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
65					70				75				80		
Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85					90					95		
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
			100					105					110		
Trp	Gln	Arg	Gly	Ala	Phe	His	Arg	Pro	Val	Leu	Gly	Gly	Phe	Arg	Glu

115	120	125
Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu		
130	135	140
Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala		
145	150	155
Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala		
165	170	175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val		
180	185	190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln		
195	200	205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met		
210	215	220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu		
225	230	235
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser		
245	250	255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile		
260	265	270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His		
275	280	285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu		
290	295	300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro		
305	310	315
Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala		
325	330	335
Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu		
340	345	350
Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val		
355	360	365
Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe		
370	375	380
Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly		
385	390	395
Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala		
405	410	415
Asn Tyr Val Glu Cys Val Gly Ala		
420		

&lt;210&gt; 3205

&lt;211&gt; 1482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3205

```

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ggctctggcca agacaccctt atctgctctg ggcctgaaac ctcacaacctc agcggacatc
120
ctgttgccacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg
180
gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccaggcc
240

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tatggccatg agatacccct gaggaacggg accctgggtg gtcctttgt ctcccccagc  
 300  
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg  
 360  
 tcgggagaga gcagtgacca ggggtccccgg acgcccaccc agcctctgtt ggagtctggc  
 420  
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct  
 480  
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc  
 540  
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 600  
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 660  
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 720  
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 780  
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 1380  
 cccgacttct ccaagtactc catgccagac aacagcccgg agacgcgggc taaagtgaag  
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 1482

<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

Xaa	Glu	Met	Glu	Gly	Thr	Ser	Pro	Ser	Ser	Pro	Pro	Pro	Ser	Gly	Val
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Arg	Ser	Pro	Pro	Gly	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Ala	Leu	Gly	Leu
			20					25					30		
Lys	Pro	His	Asn	Pro	Ala	Asp	Ile	Leu	Leu	His	Pro	Thr	Gly	Glu	Pro

		35					40					45				
Arg	Ser	Tyr	Val	Glu	Ser	Val	Ala	Arg	Thr	Ala	Val	Ala	Gly	Pro	Arg	
	50					55					60					
Ala	Gln	Asp	Ser	Glu	Pro	Lys	Ser	Phe	Ser	Ala	Pro	Ala	Thr	Gln	Ala	
65					70					75					80	
Tyr	Gly	His	Glu	Ile	Pro	Leu	Arg	Asn	Gly	Thr	Leu	Gly	Gly	Ser	Phe	
				85					90					95		
Val	Ser	Pro	Ser	Pro	Leu	Ser	Thr	Ser	Ser	Pro	Ile	Leu	Ser	Ala	Asp	
		100					105					110				
Ser	Thr	Ser	Val	Gly	Ser	Phe	Pro	Ser	Gly	Glu	Ser	Ser	Asp	Gln	Gly	
	115						120					125				
Pro	Arg	Thr	Pro	Thr	Gln	Pro	Leu	Leu	Glu	Ser	Gly	Phe	Arg	Ser	Gly	
	130					135					140					
Ser	Leu	Gly	Gln	Pro	Ser	Pro	Ser	Ala	Gln	Arg	Asn	Tyr	Gln	Ser	Ser	
145				150						155					160	
Ser	Pro	Leu	Pro	Thr	Val	Gly	Ser	Ser	Tyr	Ser	Ser	Pro	Asp	Tyr	Ser	
				165					170					175		
Leu	Gln	His	Phe	Ser	Ser	Ser	Pro	Glu	Ser	Gln	Ala	Arg	Ala	Gln	Phe	
			180					185					190			
Ser	Val	Ala	Gly	Val	His	Thr	Val	Pro	Gly	Ser	Pro	Gln	Ala	Arg	His	
	195						200					205				
Arg	Thr	Val	Gly	Thr	Asn	Thr	Pro	Pro	Ser	Pro	Gly	Phe	Gly	Trp	Arg	
	210					215					220					
Ala	Ile	Asn	Pro	Ser	Met	Ala	Ala	Pro	Ser	Ser	Pro	Ser	Leu	Ser	His	
225					230					235					240	
His	Gln	Met	Met	Gly	Pro	Pro	Gly	Thr	Gly	Phe	His	Gly	Ser	Thr	Val	
				245					250					255		
Ser	Ser	Pro	Gln	Ser	Ser	Ala	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	
		260						265					270			
Cys	Arg	His	Pro	Ala	Gly	Val	Tyr	Gln	Val	Ser	Gly	Leu	His	Asn	Lys	
	275						280				285					
Val	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Pro	Gly	Ala	
	290					295					300					
His	Gln	Gly	Asn	Leu	Ala	Ser	Gly	Leu	His	Ser	Asn	Ala	Ile	Ala	Ser	
305					310					315					320	
Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Leu	Gly	Gly	Ser	Gly	Ser	Val	
				325					330					335		
Val	Pro	Gly	Ser	Pro	Cys	Leu	Asp	Arg	His	Val	Ala	Tyr	Gly	Gly	Tyr	
			340					345					350			
Ser	Thr	Pro	Glu	Asp	Arg	Arg	Pro	Thr	Leu	Ser	Arg	Gln	Ser	Ser	Ala	
		355					360					365				
Ser	Gly	Tyr	Gln	Ala	Pro	Ser	Thr	Pro	Ser	Phe	Pro	Val	Ser	Pro	Ala	
	370					375					380					
Tyr	Tyr	Pro	Gly	Leu	Ser	Ser	Pro	Ala	Thr	Ser	Pro	Ser	Pro	Asp	Ser	
385					390					395					400	
Ala	Ala	P														

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<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 3209

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tgcgtccagc cttgtccctt ctgacctggg ccctaccac ggggaaatgt tcccatagca  
120  
gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg  
180  
ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgctgtg  
240  
gtctgtcttg gcccggtgtg tcaccctgtg ttcattcttc tcccagccat ggcctctcaa  
300  
actgggggttt tegtctccct atgaggggggt cctgggtatgt acgcgt  
346

&lt;210&gt; 3210

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5					10					15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
			35				40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50					55					60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70					75				80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
				85					90					95	

&lt;210&gt; 3211

&lt;211&gt; 1728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3211

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60  
tggacaaaag attccaagtc gatagccag gccaaagaaa gcgcagggga caactccagt  
120  
gtttccttgg ccacgtgca agccagtcgg aaggaccagg gactctatta ctgctgcac  
180  
aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag  
240  
ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt  
300  
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360  
ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca  
420

cggcctcatg cctgtcttca aacctggcca tgcctgtgtg ctttaaggtgc acaatgccat  
480  
tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgcccc  
540  
ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca  
600  
gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc  
660  
tgagaacaat atcccgtatg ctacagtggg ggaggagctg attggagaat ttgtgaagta  
720  
ttccatcagg gatgggaaag aaataaaactt cttgagaaga gaatcagaag ctggtcagaa  
780  
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840  
catgcaaggt gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggtg  
900  
caaggggattt aaaggcaact gttccatgac cttcattgat cagttttaaag cactacacca  
960  
gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca  
1020  
gaagcagccg agcattggga aaagcaaagt tcaaacaaac tctatgacag taaagaaggc  
1080  
agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact  
1140  
ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag  
1200  
cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa  
1260  
acccatcacc tgctgtcttc actcaaata tttcagaaca ggatttgcca ccagggttat  
1320  
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1380  
atttttacca acctcacatc atgtgtatat ttgtgtatatt gcacatgggt gtgctgtcga  
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1560  
atcaagttgt tccactgggtg tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt  
1620  
gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt  
1680  
taaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1728

&lt;210&gt; 3212

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3212

Ser	Gly	Asn	Ile	Lys	Leu	Ser	Tyr	Gln	Phe	Ser	Glu	Ile	His	Glu	Asp
1				5				10				15			
Ser	Thr	Val	Cys	Trp	Thr	Lys	Asp	Ser	Lys	Ser	Ile	Ala	Gln	Ala	Lys

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      20      25      30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
      35      40      45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
      50      55      60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
      65      70      75      80
Leu Ser Ser His Thr Glu Tyr
      85

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<210> 3213  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

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<400> 3213
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120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcatcggct ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtagcga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

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<400> 3214
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
      20      25      30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
      35      40      45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
      50      55      60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
      65      70      75      80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
      85      90

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<210> 3215  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

<400> 3215

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120  
accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag  
180  
catgacttta tcctgcaggc cgagcgggaa acgttcacgc agcagatgaa ggatgtcatg  
240  
gacaaggcag aggacatgct cagcaggagc acagacgccg accgtggctc cgacccaggg  
300  
accagcccg caccctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc  
360  
caagccaacg ccccggtgta tcagcagaac gtcctgcaca ccgggaagag gtgggttcac  
420  
atctgtccgg tgctgagcc ccccgcccc gagggccctt gaatcttcgc cccacttcc  
480  
tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc  
540  
ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc  
597

&lt;210&gt; 3216

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
1				5					10					15	
Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35					40					45			
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55					60				
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65					70					75				80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85						90					95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100						105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
	115					120							125		
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135						140			
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

&lt;210&gt; 3217

&lt;211&gt; 2570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3217

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&lt;210&gt; 3218

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3218

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			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
			35				40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro
			50			55					60				
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
					70					75				80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90						95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100				105						110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

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<210> 3219
<211> 1241
<212> DNA
<213> Homo sapiens
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2426

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 1241

<210> 3220  
 <211> 413  
 <212> PRT  
 <213> Homo sapiens

<400> 3220  
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 35 40 45  
 Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr  
 50 55 60  
 Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro  
 65 70 75 80  
 Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met  
 85 90 95  
 Glu Pro Met Val Asn Gly Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg  
 100 105 110  
 Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr  
 115 120 125  
 Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro  
 130 135 140  
 Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser  
 145 150 155 160  
 Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro  
 165 170 175  
 Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly  
 180 185 190  
 Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro  
 195 200 205  
 Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser  
 210 215 220  
 Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro  
 225 230 235 240  
 Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu  
 245 250 255  
 Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala Ala  
 260 265 270  
 Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser  
 275 280 285  
 Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro  
 290 295 300  
 Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly  
 305 310 315 320  
 Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly  
 325 330 335  
 Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

	340		345		350										
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe
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Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser
	370					375					380				
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr
385					390					395				400	
Ser	Asp	Pro	Ser	Arg	Thr	Pro	Glu	Glu	Glu	Pro	Leu	Asn			
			405						410						

&lt;210&gt; 3221

&lt;211&gt; 1585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3221

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1140

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&lt;210&gt; 3222

&lt;211&gt; 331

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3222

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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
		35					40				45				
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50					55				60					
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65					70					75				80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
		100					105						110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
	115						120						125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
	130					135					140				
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145				150						155					160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
	195						200						205		
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210					215						220			
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
225					230					235				240	
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<210> 3224

<211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 3224

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		20						25					30		
Val	Ile	Gly	Val	Ile	Leu	Gly	Ala	Glu	Ala	Ser	Arg	Arg	Tyr	Lys	Lys
		35					40					45			
Val	Ile	Pro	Gly	Ala	Glu	Pro	Leu	Ile	Cys	Ala	Ser	Ser	Leu	Leu	Ala
	50					55				60					
Thr	Ala	Pro	Cys	Leu	Tyr	Leu	Ala	Leu	Val	Leu	Ala	Pro	Thr	Thr	Leu
65					70					75					80
Leu	Ala	Ser	Tyr	Val	Phe	Leu	Gly	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Cys
				85					90					95	
Asn	Trp	Ala	Val	Val	Ala	Asp	Ile	Leu	Leu	Ser	Val	Val	Val	Pro	Arg
			100					105					110		
Cys	Arg	Gly	Thr	Ala	Glu	Ala	Leu	Gln	Ile	Thr	Val	Gly	His	Ile	Leu
		115					120					125			
Gly	Asp	Ala	Gly	Ser	Pro	Tyr	Leu	Thr	Gly	Leu	Ile	Ser	Ser	Val	Leu
	130					135					140				
Arg	Pro	Gly	Ala	Leu	Thr	Pro	Leu	Gln	Arg	Phe	Arg	Ser	Leu	Gln	Gln
145					150					155					160
Ser	Phe	Leu	Cys	Cys	Ala	Phe	Val	Ile	Ala	Leu	Gly	Gly	Gly	Cys	Phe
			165						170					175	
Leu	Leu	Thr	Ala	Leu	Tyr	Leu	Glu	Arg	Asp	Glu	Thr	Arg	Ala	Trp	Gln
			180					185					190		
Pro	Val	Thr	Gly	Thr	Pro	Asp	Ser	Asn	Asp	Val	Asp	Ser	Asn	Asp	Leu
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<210> 3225  
 <211> 506  
 <212> DNA  
 <213> Homo sapiens

<400> 3225

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<210> 3226  
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 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu  
 35 40 45  
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala  
 50 55 60  
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg  
 65 70 75 80  
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val  
 85 90 95  
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly  
 100 105 110  
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<210> 3227  
 <211> 1623  
 <212> DNA  
 <213> Homo sapiens

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 1380  
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<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
			35					40					45		
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
			50					55				60			
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65                      70                      75                      80  
 Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met  
                                  85                      90                      95  
 Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu  
                                  100                      105                      110  
 Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala  
                                  115                      120                      125  
 Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu  
                                  130                      135                      140  
 Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg  
 145                      150                      155                      160  
 Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser  
                                  165                      170                      175  
 Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala  
                                  180                      185                      190  
 Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala  
                                  195                      200                      205  
 Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln  
                                  210                      215                      220  
 Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe  
 225                      230                      235                      240  
 Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala  
                                  245                      250                      255  
 Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala  
                                  260                      265                      270  
 Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu  
                                  275                      280                      285  
 Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu  
                                  290                      295                      300  
 Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His  
 305                      310                      315                      320  
 Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val  
                                  325                      330                      335  
 Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser  
                                  340                      345                      350  
 Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe  
                                  355                      360                      365  
 Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu  
                                  370                      375                      380  
 Asp  
 385

&lt;210&gt; 3229

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

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 cctgcactgg gcgcgcgaga gctgctaggg cggtttctct gcctcgggcc tgttgggcag  
 120  
 ggccgggctaa ggtgcgcgtg ctcgctggtt ctaacccttc tgttgggcgt ttctgctgag  
 180

aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcttt gctcgttggt  
 240  
 gctcttcgga ggcggcgatc cccgaaggcg agctgaaata cggctgcagg ctacaatttg  
 300  
 cagccgacca ttatggaaga cggcaagcgg gagagggtggc ccaccctcat ggagcgcttg  
 360  
 tgctcggatg gcttcgcatt tccccaatat cccattaaac cgtatcatct gaagaggatc  
 420  
 cacagagctg tcttacgtgg taatctggag gaactgaagt accttctgct cacgtattat  
 480  
 gacatcaata agagagacag gaaggaaagg accgccctac atttggcctg tgccactggc  
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 660  
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 720  
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 780  
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 gtgaaaatgg tggaaatctt attaaagaaa aaagcaaatg taaatgccat tgattatctt  
 900  
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<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

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Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
			50			55					60				
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85				90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100				105					110			
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
			115			120					125				
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
			130			135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145		150		155		160									
Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
				165					170					175	
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
			180					185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
		195					200					205			
Glu	Lys	Asp	Ile	Val	Ile	Leu	Leu	Leu	Gln	His	Asn	Ile	Asp	Val	Phe
	210					215					220				
Ser	Arg	Asp	Val	Tyr	Gly	Lys	Leu								
225					230										

&lt;210&gt; 3231

&lt;211&gt; 1367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3231

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60
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120
taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcggtcttg
180
tgcattcttg ctacctgtgg gtcgaagatg tcggacatcg gagactgggt caggagcatc
240
ccggcgatca cgcgctattg gttcgcgcgc accgtcgcgc tgcccttggt cggcaaactc
300
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360
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420
tatttggtca atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt
480
gatgggaggc cagcagacta tttattcatg ctctcttta actggatttg catcgtgatt
540
actggcttag caatggatat gcagttgctg atgattcctc tgatcatgtc agtactttat
600
gtctgggccc agctgaacag agacatgatt gtatcatttt ggtttggaac acgatttaag
660
gcctgctatt taccctgggt tatccttgga ttcaactata tcatcgaggg ctcggtaatc
720
aatgagctta ttggaaatct ggttgacat ctttattttt tctaattgtt cagataccca
780
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840
agtaggagag gaggagtatc aggatttggg gtgccccctg ctagcatgag gcgagctgct
900
gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
960
tgaaggggcg gcctcgggca gccgctcctc tcaagccaca tttctccca gtgctgggtg
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1080

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<210> 3232
<211> 251
<212> PRT
<213> Homo sapiens
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<210> 3233
<211> 975
<212> DNA
<213> Homo sapiens
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 120  
 atgacaatTT tcatctctcc cgcttcccc tccaaagagt tctacttgTc caattctgaa  
 180  
 aaggaacgTt atgaaaaaga attcagccaa gaaagacaac aagaaatTTT gagaagagca  
 240  
 gcaagagcTt tacctatcTa taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa  
 300  
 tgtcagctga ttaaacctga tcgggcgcac cactgctcag cctgtgactc atgtattctt  
 360  
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc  
 420  
 ttcttctgtt ttttattgTa ttccctatta tattgccttt tcgtggccgc acagttttag  
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 660  
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacataca gcttgaatgt  
 720  
 gctgtctggc tagccctctc acaagtcggt cactctgcac aaggaatccg agagctcatc  
 780  
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacgggtcca caagcaattc  
 840  
 tgtctttctc aaggctTTTT cttgtgcagt atgaaatcct tcatatttca tatgaagtat  
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<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

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 1 5 10 15  
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 20 25 30  
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala  
 35 40 45  
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr  
 50 55 60  
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala  
 65 70 75 80  
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

				85						90					95				
Tyr	Cys	Glu	Lys	Cys	Gln	Leu	Ile	Lys	Pro	Asp	Arg	Ala	His	His	Cys				
			100					105					110						
Ser	Ala	Cys	Asp	Ser	Cys	Ile	Leu	Lys	Met	Asp	His	Pro	Cys	Pro	Trp				
		115					120					125							
Val	Asn	Asn	Cys	Val	Gly	Phe	Ser	Asn	Tyr	Lys	Phe	Phe	Leu	Leu	Phe				
	130				135						140								
Leu	Leu	Tyr	Ser	Leu	Leu	Tyr	Cys	Leu	Phe	Val	Ala	Ala	Gln	Phe					
145				150						155									

&lt;210&gt; 3235

&lt;211&gt; 551

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3235

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120
gcagtacaag ttagtatgaa gcatgagatt gaacttgcca tgaagttgct ggagaaagat
180
atccatgaga aacaagatac tctgataggc cttcgacaac aactagagga agttaagca
240
attaacatag agatgtatca aaagttgcag gggttctgaag atggcttgaa agaaaaaat
300
gaaataattg cccgactaga agaaaaaacc aataaaatta ctgcagccat gaggcagctg
360
gaacaaagat tgcagcaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
420
tatctacaag aatgtctcag taaatctgat agtctgcaga aacaaatctc ccaaaggag
480
aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagactttg
540
caggaagatc t
551

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&lt;210&gt; 3236

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3236

Xaa	Glu	Thr	Glu	Leu	Gln	Thr	Tyr	Lys	His	Ser	Arg	Gln	Gly	Leu	Asp				
1				5				10					15						
Glu	Met	Tyr	Asn	Glu	Ala	Arg	Arg	Gln	Leu	Arg	Asp	Glu	Ser	Gln	Leu				
			20					25				30							
Arg	Gln	Asp	Val	Glu	Asn	Glu	Leu	Ala	Val	Gln	Val	Ser	Met	Lys	His				
		35				40					45								
Glu	Ile	Glu	Leu	Ala	Met	Lys	Leu	Leu	Glu	Lys	Asp	Ile	His	Glu	Lys				
	50				55						60								
Gln	Asp	Thr	Leu	Ile	Gly	Leu	Arg	Gln	Gln	Leu	Glu	Glu	Val	Lys	Ala				
65				70						75				80					
Ile	Asn	Ile	Glu	Met	Tyr	Gln	Lys	Leu	Gln	Gly	Ser	Glu	Asp	Gly	Leu				

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<400> 3237
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120
gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcggatcaa cgagagtctt caggagtgc ggctgctgct ggcgggcgcg
240
gagggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
ggtgtgctgc ggggccgggc gcgcgagcgc gagcagctgc aggcggaagc gagcgagcgc
360
ttcgctgccg gctacatcca gtgcatgcac gaggtgcaca cgttcggtgc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcggggcc acctagagcc
540
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600
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
660
gtcctgctg agggggccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
720
attgcccgga gtgtctggag gccttgggtga ccaatgccag ccagagtcct gcgggggttg
780
gcccggccct ccctggatct cctccctcct ccagggggtt cagatgtggg ggggtagggc
840
cctggaagtc tcccaggctc tccctccctc ctctgatgga tggcttgagc ggcagcccct
900
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960
ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcc
1020

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gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga  
 1080  
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa acaaaagctt  
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 gaacttgcca cttcagcggg gagatgagag gcagggtgcac tcagctgcac tgcccagagc  
 1200  
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 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg  
 1320  
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 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

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	20							25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
	35						40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70					75				80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85						90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165						170					175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195					200					205				
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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120  
ggtttgttcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa gggtgctatc  
180  
caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaac aggcattgctg  
240  
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc  
300  
ctctaccaga agtggcagat gatgctggcc tatgcaactgc acgtcctccc cttcagcgtt  
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420  
gcccgaattgg gt  
432

<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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Arg	Arg	Val	Thr	Arg	Asn	Leu	Val	Arg	Asn	Lys	Leu	Ala	Val	Ile	Thr
			20					25					30		
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val
		35					40					45			
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val
	50					55					60				
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu
65					70					75				80	
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu
			85						90					95	
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala
		100						105					110		
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser
		115					120					125			
Val	Cys	Tyr	Trp	Thr	Leu	Gly	Leu	His	Pro	Glu	Val	Ala	Arg	Leu	Gly
	130					135					140				

<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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 120  
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc  
 180  
 acagacatgc tcccaggaca ctcgacagca aggaggtacg gcgggcccag ccagccaagg  
 240  
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg  
 300  
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggcctccctc agccccacac  
 360  
 cccacccagg caggagcggg gcctggcccg gggcaggcgg gtgggagagc tctactgagt  
 420  
 ggcagcaggg catggcccct gatgctgcag gtaccagggc tgcagctgca gaaacctcag  
 480  
 tgggaaccca gg  
 492

&lt;210&gt; 3242

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
1				5					10					15	
Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
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Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
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&lt;210&gt; 3243

&lt;211&gt; 944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3243

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<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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			20					25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
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Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
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Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
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		115					120					125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
	130					135					140				
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
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Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
			165					170						175	
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
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<211> 980
<212> DNA
<213> Homo sapiens
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240					
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420					
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<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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 20           25           30
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr
 35           40           45
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
 50           55           60
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu
 65           70           75           80
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe
 85           90           95
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile
100          105          110
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Asp Leu Thr Asp Ala Val
115          120          125
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr
130          135          140
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu
145          150          155          160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
165          170          175
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val
180          185          190
Glu Ala Ser Phe Pro Gln Leu Leu Val Tyr Glu Arg Leu Gln Gln Leu
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Glu Leu Trp Lys Ile Ile Ala Glu Pro Val Thr
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<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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<210> 3248

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

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			20					25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35					40					45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55					60				
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
65					70					75				80	
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
			85						90					95	
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
			100						105				110		
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
		115					120					125			
Arg	Ala	Gln	Ile	Phe	Arg	Arg	Asn	Gln	Ser	Leu	Val	Gln	Asp	Met	Asp
	130					135						140			
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
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Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
			165						170					175	
Ser	Ala	Arg	Ser	Asp	Leu	Asn	Pro	Ala	Asn	Gly	Ser	Tyr	Pro	Phe	Gln

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Ala	Leu	Arg	Gln	Arg	Ser	His	Gly	Gly	Ile	Asp	Val	Lys	Val	Thr	Ser
	195						200					205			
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Val	Ser	Trp	Asp												
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&lt;210&gt; 3249

&lt;211&gt; 4487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3249

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<210> 3250

<211> 849

<212> PRT

<213> Homo sapiens

<400> 3250

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Trp	Val	Pro	Thr	Asp	Cys	Phe	Ser	Leu	Ser	Leu	Ser	Pro	Pro	His	Ser	35	40	45	
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Thr	Arg	Pro	His	Ala	Gly	Asp	Arg	Asp	Pro	Arg	Gly	Ala	Pro	Gly	Gly	195	200	205	
Ser	Arg	Arg	Gln	Asp	Glu	Ala	Leu	Arg	Glu	Leu	Arg	His	Gly	His	Val	210	215	220	
Arg	Ser	Leu	Ser	Glu	Arg	Leu	Leu	Gln	Leu	Ser	Leu	Glu	Arg	Asn	Gly	225	230	235	240
Ala	Arg	Ala	Pro	Ser	His	Met	Ser	Ser	Ser	His	Ser	Phe	Pro	Gln	Leu	245	250	255	
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Pro	Glu	Ser	Arg	Gly	Pro	Pro	Pro	Gln	Tyr	Pro	His	Val	Val	Leu	Ala	275	280	285	
His	Glu	Thr	Thr	Thr	Ala	Val	Thr	Asp	Pro	Arg	Tyr	Arg	Ala	Arg	Gly	290	295	300	
Ser	Pro	His	Phe	Gln	His	Ala	Glu	Val	Arg	Ile	Leu	Gln	Ala	Gln	Val	305	310	315	320
Pro	Pro	Val	Phe	Leu	Gln	Gln	Gln	Gln	Gln	Tyr	Gln	Tyr	Leu	Gln	Gln				

325 330 335  
 Ser Gln Glu His Pro Pro Pro Pro His Pro Ala Ala Leu Gly His Gly  
 340 345 350  
 Pro Leu Ser Ser Leu Ser Pro Pro Ala Val Glu Gly Pro Val Ser Ala  
 355 360 365  
 Gln Ala Ser Ser Ala Thr Ser Gly Ser Ala His Leu Ala Gln Met Glu  
 370 375 380  
 Ala Val Leu Arg Glu Asn Ala Arg Leu Gln Arg Asp Asn Glu Arg Leu  
 385 390 395 400  
 Gln Arg Glu Leu Glu Ser Ser Ala Glu Lys Ala Gly Arg Ile Glu Lys  
 405 410 415  
 Leu Glu Ser Glu Ile Gln Arg Leu Ser Glu Ala His Glu Ser Leu Thr  
 420 425 430  
 Arg Ala Ser Ser Lys Arg Glu Ala Leu Glu Lys Thr Met Arg Asn Lys  
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 485 490 495  
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 545 550 555 560  
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 580 585 590  
 Gln Gln Arg Gln Ala Gly Ala Pro Gly Gly Ser Ser Gly Ser Gly Gly  
 595 600 605  
 Ser Pro Glu Leu Ser Ala Leu Arg Leu Ser Glu Gln Leu Arg Glu Lys  
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 625 630 635 640  
 Lys Tyr Leu Glu Glu Arg Ala Met Arg Gln Phe Ala Met Asp Ala Ala  
 645 650 655  
 Ala Thr Ala Ala Ala Gln Arg Asp Thr Thr Leu Ile Arg His Ser Pro  
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 Gln Pro Ser Pro Ser Ser Ser Phe Asn Glu Gly Leu Leu Thr Gly Gly  
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 690 695 700  
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180					
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420					
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1980  
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 <211> 254  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr  
 50 55 60  
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly  
 65 70 75 80  
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu  
 85 90 95  
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu  
 100 105 110  
 Arg Glu Glu Ile Ala Arg Gln Ala Ala Lys Met Ala Asp Glu Ala Ile  
 115 120 125  
 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly  
 130 135 140  
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg  
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 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu  
 165 170 175  
 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu  
 180 185 190  
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp  
 195 200 205  
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu  
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 Arg Pro Ser Ala Pro Leu Cys Tyr Thr His Ser Ile Cys Thr Pro His  
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 180  
 aagacagggg caccctggca gtagcaggta gcctttggcc atctctgcag caggctggtg  
 240

tttgggatcc acgaggcacg gaaagtcagc actctggagg acctggttg ggtcacccctg  
300  
ggccaggtgc agatcgtggg aagctggata tgtgaaatgg caggtgctgg tgaacttgcg  
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686

&lt;210&gt; 3254

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3254

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Tyr	Gln	Ser	Ser	His	Met	Val	Asp	Tyr	Gln	Pro	Tyr	Arg	Lys	His	Lys
			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
			35				40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
			50				55					60			
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70					75				80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
				85					90					95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100					105					110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
			115				120					125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
			130				135					140			
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
145					150					155				160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
				165				170						175	
Pro	Phe	Tyr	Gln												
			180												

&lt;210&gt; 3255

&lt;211&gt; 724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3255

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 gcgagaggag aggacggcga tcgtagggga cacctgagag tcagaggccc gagggggctg  
 120  
 ggactcatgt cgaggtcggg gaaggatgta aaacccggac ggacatcact gtaggccgca  
 180  
 cctgctgaga ggccagagct gcctccttga gagtgaagtt gtttacagac aagagaagag  
 240  
 atcttgggcg acacatcaca gctagccgag aatcccgaag ggtcagcaga gcctagaaag  
 300  
 gaatatgagg ggggtcggaa tgaggcaggc gaaaggcacg gacgtgggag ggcacggcta  
 360  
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 420  
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 480  
 caaggcactt ttatatatcc agatggatcc agatatgaag gagagtgggc aaatgacctg  
 540  
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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

Ser	Cys	Leu	Gln	Thr	Arg	Glu	Glu	Ile	Leu	Ala	Asp	Thr	Ser	Gln	Leu
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Ala	Ala	Asn	Pro	Glu	Gly	Ser	Ala	Glu	Pro	Arg	Lys	Glu	Tyr	Glu	Gly
		20						25				30			
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40				45				
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55				60					
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70				75					80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85					90						95	
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
			100					105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
		115					120					125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135				140					
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150				155					160	
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

<210> 3257  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

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<210> 3258  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 3258  
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 35 40 45  
 Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser  
 50 55 60  
 Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg  
 65 70 75 80  
 Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys  
 85 90 95  
 Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala  
 100 105 110  
 Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg  
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<210> 3259  
 <211> 747  
 <212> DNA  
 <213> Homo sapiens

<400> 3259  
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2458

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 240  
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 660  
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<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35				40					45				
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50				55						60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90						95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
			100					105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
			115				120					125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130					135					140				
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145					150					155				160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170					175		
Phe	Gln	Thr	Arg	Lys	Asp	Gly	Ser	Ser	Arg	Leu	Thr	Cys	Thr	Thr	Arg

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Ser Ala Arg Thr Pro  
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190

<210> 3261  
<211> 1323  
<212> DNA  
<213> Homo sapiens

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1140  
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aaa  
1323

<210> 3262  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 3262  
Ile Pro Val Ala Gln Pro Ser Val Met Asp Asp Ile Glu Val Trp Leu  
1 5 10 15  
Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu  
20 25 30  
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val  
35 40 45  
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn  
50 55 60  
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala  
65 70 75 80  
Leu

<210> 3263  
<211> 1128  
<212> DNA  
<213> Homo sapiens

<400> 3263  
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cggggacgca agggccgggg cgggggtccc ccgtcctcct ctgactccga gcccgaggcc  
120  
gagctggaga gagaggccaa gaaatcagcg aagaagccgc agtcctcaag cacagagccc  
180  
gccaggaaac ctggccagaa ggagaagaga gtgcggcccc aggagaagca acaagccaag  
240  
cccgtgaagg tggagcggac ccggaagcgg tccgagggct tctcgatgga caggaaggta  
300  
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag  
360  
tttgccctaa aggtcgacag cccggacgtg aaggggtgcc tgaatgcct agaggagctg  
420  
ggaaccctgc aggtgacctc tcagatcctc cagaagaaca cagacgtggt ggccaccttg  
480  
aagaagattc gccgttacaa agcgaacaag gacgtaatgg agaaggcagc agaagtctat  
540  
acccggctca agtcgcgggt cctcggccca aagatcgagg cgggtgcagaa agtgaacaag  
600  
gctgggatgg agaaggagaa ggccgaggag aagctggccg gggaggagct ggccggggag  
660  
gaggcccccc aggagaaggc ggaggacaag cccagcaccg atctctcagc cccagtgaat  
720  
ggcgaggcca catcacagaa gggggagagc gcagaggaca aggagcacga ggagggtcgg  
780

gactcggagg aggggccaag gtgtggctcc tctgaagacc tgcacgacag cgtacgggag  
840  
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900  
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960  
ctcaggctgc ccctctcctt ccccggtctg caggagagca gagcagagaa ctgtggggaa  
1020  
cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt  
1080  
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1128

<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

Ser	Arg	Tyr	Arg	Arg	Ser	Ser	Gly	Asp	Glu	Leu	Arg	Glu	Asp	Asp	Glu
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Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly	Arg	Gly	Arg	Gly	Pro	Pro	Ser
			20					25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
50					55					60					
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65					70					75					80
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
				85					90					95	
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105					110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
	115						120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
130					135						140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145					150					155					160
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
			165						170					175	
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
		180					185						190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
	195						200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
210					215						220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225				230						235				240	
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
			245						250					255	
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
		260						265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

275                      280                      285  
 Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser Glu Ala Leu  
 290                      295                      300  
 Asp Glu Glu Ser  
 305

<210> 3265  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 3265  
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 60  
 ctttttcgtg gttttcaaaa tgtttccatt gagggcgtat tacttttata atcaacaaaa  
 120  
 gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa  
 180  
 ggtacattat tggtgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca  
 240  
 gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac  
 300  
 ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctggtgc acggtgctgg  
 360  
 ttgcccaggc gcatgcggaac ggaggggtgtg gggcacgtgg gtctcgggac aggaagccca  
 420  
 ggcaggtctc aacctggctg ccaactgcca cttgccaccc tcatactaga gggagcaccc  
 480  
 agaggggtcca gcctcgctcc ccttctcctc cacgctccac gcgt  
 524

<210> 3266  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 3266  
 Met Arg Phe Arg Lys Arg Lys Asn Phe Lys Lys Lys Arg Ser Lys Leu  
 1                      5                      10                      15  
 Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg  
 20                      25                      30  
 Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro  
 35                      40                      45  
 Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu  
 50                      55                      60  
 Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala  
 65                      70                      75                      80  
 Pro Arg

<210> 3267  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3267

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60  
tggaatacat tgaataaaaa ggtcgcacaa agaattgcac agctacagga agctttgttg  
120  
cattgtggga agtttcaaga tgccttggag ccattgctca gctgggtggc agataccgag  
180  
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc  
240  
caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt  
300  
caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact  
360  
ggacagctgg agagtcttga aagtagatgg act  
393

&lt;210&gt; 3268

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5				10					15		
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
		20					25					30			
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
	35					40					45				
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
	50				55				60						
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70				75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85					90					95		
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
		100					105					110			
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120					125			
Arg	Trp	Thr													
		130													

&lt;210&gt; 3269

&lt;211&gt; 1423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3269

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60  
tttgaagctg taacttttatg agcgattatt tactaccttt gagaaatgtg ttttagtata  
120  
aaatatagga tgtggaagcg aaaaaatatc tgggtagcaa gtgaggtgta ctcaaaaata  
180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac  
 240  
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc  
 300  
 tagactttga ggtggaccct ggctcccagg gctgtgtact ccagagccgt gtttctcttt  
 360  
 tgctcagact gaacaagtgg aacgaaatta cattaagaa aagaaggcag cagtgaagaa  
 420  
 atttgaagac aagaaggttg agctgaaaga gaacctgatt gctgagctag aagaaaagaa  
 480  
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggaggtgaa  
 540  
 acctatcatg accagaaagt tgcggaggcg accaaatgat cccgtcccca tcccagacaa  
 600  
 gaggaggaaa cctgctccag ccagctaaa ctatttgta acagatgaac agatcatgga  
 660  
 ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catcctctcc  
 720  
 tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcggataga  
 780  
 agatggcaaa ctgtattatg acaaaagatg gtaccacaag agccaggcca tctatctgga  
 840  
 gtcaaaggac aaccagaaac tgagctgctg gatcagttct gtaggagcca atgagatctg  
 900  
 ggtgaggaag acaagtgaca gcaccaagat gaggatctac ctgggtcagc ttcagcgagg  
 960  
 gctcttcgtg atccgccggc gctcagctgc ttgactttct acagtgtctt tctcttgacc  
 1020  
 ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt  
 1080  
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta  
 1140  
 gggcactttt gtggccggat gcttccaact ttgtcagttt tttctgcctc aacttcttcc  
 1200  
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttggggggtt tgatttactt  
 1260  
 tcctttttatt tctttatttt ttgcttatac ttgtttttga aaacctcttc tgagtttgaa  
 1320  
 gggacagcta tttttattga ttatctttta gtctctctac catggagaag agcaggaagg  
 1380  
 gataactctt ccagtgcatt ttcattgttt gaatcggatt agt  
 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5				10						15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

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      35          40          45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
 50          55          60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
65          70          75          80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85          90          95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100          105          110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115          120          125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130          135          140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
145          150          155          160
Phe Val Ile Arg Arg Arg Ser Ala Ala
      165

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<210> 3271  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

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<400> 3271
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gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
420
atggcactgc catccctctg aggcggttgt atccccaggg atgt
464

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<210> 3272  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

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<400> 3272
Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
 1          5          10          15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20          25          30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35          40          45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

```

50		55		60	
Ile	Leu	Ala	Ala	Thr	Ile
65		70		75	
Ile	Ser	Cys	Ile	Ala	Tyr
		85		90	
Ser	His	Arg	Leu	Pro	Ala
		100		105	
Cys	Ser	Ala	Val	Ser	Pro
		115		120	
Ala	Thr	Thr	Glu	Lys	Pro
		130		135	
				140	

&lt;210&gt; 3273

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

```

ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
gttgtctata aagggcgacg gaaggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
gttgtgagag aatttggaaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttg tgacatttct cctagga
387

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&lt;210&gt; 3274

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3274

Xaa	Ala	Pro	Gly	Met	Glu	Asn	Phe	Ile	Leu	Tyr	Glu	Glu	Ile	Gly	Arg
1				5					10					15	
Gly	Ser	Lys	Thr	Val	Val	Tyr	Lys	Gly	Arg	Arg	Lys	Gly	Thr	Ile	Asn
			20					25					30		
Phe	Val	Ala	Ile	Leu	Cys	Thr	Asp	Lys	Cys	Arg	Arg	Pro	Glu	Ile	Thr
		35					40					45			
Asn	Trp	Val	Arg	Leu	Thr	Arg	Glu	Ile	Lys	His	Lys	Asn	Ile	Val	Thr
		50				55					60				
Phe	His	Glu	Trp	Tyr	Glu	Thr	Ser	Asn	His	Leu	Trp	Leu	Val	Val	Glu
65				70					75					80	
Leu	Arg	Thr	Gly	Gly	Ser	Leu	Lys	Thr	Val	Ile	Ala	Gln	Asp	Glu	Asn
			85					90						95	
Leu	Pro	Glu	Asp	Val	Val	Arg	Glu	Phe	Gly	Ile	Asp	Leu	Ile	Ser	Gly
			100				105					110			
Leu	His	His	Leu	His	Lys	Leu	Gly	Ile	Leu	Phe	Val	Thr	Phe	Leu	Leu

Gly 115 120 125

<210> 3275  
<211> 1266  
<212> DNA  
<213> Homo sapiens

<400> 3275  
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60  
agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag  
120  
ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga  
180  
agcgtccggt ggccggctta gttaggagct atggctaaac atcatcctga ttgatcttt  
240  
tgccgcaagc aggctggtgt tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt  
300  
gtgatttgtg actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac  
360  
tatggatctt accaggggcg ctgtgtgatc tgtggaggac ctggggtctc tgatgcctat  
420  
tattgtaagg agtgcaccat ccaggagaag gacagagatg gctgccccaa gattgtcaat  
480  
ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg  
540  
tgattggtgg gtggccctt cctcccccca acatcagtct gctgcagctg ccagaaaaca  
600  
tgcctactac taccagcaga aaggggagcag agcccagagc atcaccagga gtgcctgcta  
660  
gtgtactggc agcttgccac cccctcctct cccttcaccc agacacgtgg tagggatgga  
720  
aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt  
780  
aatggttttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct  
840  
caaccaagat cttctaaaaa gaaataatat tttagtcttc tgcttgagga actgactgtg  
900  
aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg  
960  
aacctttggt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt  
1020  
ttgggggggg ggtggggggg cagggtctctg ccctcttgaa aggcatttac ttgtttaaca  
1080  
cttgtccagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact  
1140  
agtctcatat tattttcctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat  
1200  
aaagtgggtg tttattttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1260  
aaaaaa  
1266

<210> 3276  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3276  
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly  
 1 5 10 15  
 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile  
 20 25 30  
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu  
 35 40 45  
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro  
 50 55 60  
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys  
 65 70 75 80  
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr  
 85 90 95  
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg  
 100 105 110

<210> 3277  
 <211> 1435  
 <212> DNA  
 <213> Homo sapiens

<400> 3277  
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 ctgcgtggga ggcagaaaga gctaattgcg ccacgcttgt cctcggcca ccgccccacc  
 120  
 cagacttccg tctccttaaa atgttcatgc gtaagtgcgt ggcagaagcg gctcaagcgc  
 180  
 actcgtgcgt cattgctgtc agggccgagg gagcggtgca aggccgccgc gtgacgtcag  
 240  
 gacgccgcgg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg  
 300  
 tgtcgtggcc gtgttgctga tcgcctgggt ggttggtggc gtgtccctgc agcgaaggat  
 360  
 cctgggtggc agtgaaaaag cagtctggct cccgaggtcc accccttata cccaaggtc  
 420  
 cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg  
 480  
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 540  
 gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggtcttgcc  
 600  
 aagtccagca gcaatgggccc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag  
 660  
 ctttgagca gcagcagtac taccagtggg accagcagta caactatgcc taccctaca  
 720  
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg  
 780

ccggctccta tggctagcca caccaccagea gccatccgca ccccaacacc aagggactct  
 840  
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca  
 900  
 gctgccgtcg gctcagcccc ctcagccctc aaatccccca catgggggtc acacgctgaa  
 960  
 cagtggccct cagcctggga cagctccagc cacacagcan ncagccaggc ggggcccgcc  
 1020  
 acgggccagg cctatgggcc acacacctac accgaacctg ccaagcccaa gaagggccaa  
 1080  
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 1140  
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 1200  
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 1260  
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 1320  
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg  
 1380  
 tgctgcaggc gcggctgcag gacggctcgg cctataccat tgactggagc cgga  
 1435

&lt;210&gt; 3278

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
1				5				10					15		
Tyr	Ser	Met		Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr
			20					25					30		Pro
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35					40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50					55					60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70				75					80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
			85					90						95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

&lt;210&gt; 3279

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3279

nngcgcgccc accgcgccgc atccatgttc gacaccacac cccactctgg ccggagcacg  
 60  
 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgcccccaag ccggccccca  
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaaggggt  
 180  
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcat ccgcaacagc  
 240  
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac  
 300  
 ttccggaaac tgttcagcaa actccccgaa gcagaacgcc tcattgtgga ttactcctgc  
 360  
 gccctgcagc gtgagatcct gctccagggc cgcctctacc tctctgagaa ctggatctgc  
 420  
 ttctacagca acatcttccg ctgggagacc acgatctcca tccagctgaa ggaagtgaca  
 480  
 tgtctgaaga aggaaaagac ggccaagctg atccccaacg ccatccagat ctgcacggag  
 540  
 agcgagaagc atttcttcac ttcctttggg gccctgacc gctgcttctt cctcatcttc  
 600  
 cgcctctggc agaatgcact gcttgaaaag acgctgagtc cccgcgagct ctggcacctg  
 660  
 gtgcatcagt gctacggctc agagctgggc ctcaccagtg aggatgagga ctatgtctcc  
 720  
 cccttgcagc tgaacggtct ggggaccccc aaggaagtgg gagatgtgat cgccttgagc  
 780  
 gacatcacct cctcgggggc agctgaccgc agccaggagc caagcccagt gggttcgcgc  
 840  
 cgtggccatg tcacgcccac cctttcccg gccagcagcg acgcagacca tggggcagag  
 900  
 gaggacaagg aggagcaggt agacagccag ccagacgcct cctccagcca gacagtgacc  
 960  
 ccggtggctg aacccccgag cacagagccc acccagcctg acggggccac caccctgggc  
 1020  
 cccttggatc tgctgccag tgaggagcta ttgacagaca caagtaactc ctcttcattc  
 1080  
 actggggagg aagcggactt ggctgccttg cttcccgacc tctccggccg  
 1130

&lt;210&gt; 3280

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3280

Xaa	Arg	Ala	His	Arg	Ala	Ala	Ser	Met	Phe	Asp	Thr	Thr	Pro	His	Ser
1				5					10					15	
Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
		35				40						45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
	50					55					60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85					90						95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

100	105	110
Arg Leu Ile Val Asp Tyr Ser Cys	Ala Leu Gln Arg Glu Ile Leu Leu	
115	120	125
Gln Gly Arg Leu Tyr Leu Ser Glu	Asn Trp Ile Cys Phe Tyr Ser Asn	
130	135	140
Ile Phe Arg Trp Glu Thr Thr Ile Ser	Ile Gln Leu Lys Glu Val Thr	
145	150	155
Cys Leu Lys Lys Glu Lys Thr Ala Lys	Leu Ile Pro Asn Ala Ile Gln	
165	170	175
Ile Cys Thr Glu Ser Glu Lys His Phe	Phe Thr Ser Phe Gly Ala Arg	
180	185	190
Asp Arg Cys Phe Leu Leu Ile Phe Arg	Leu Trp Gln Asn Ala Leu Leu	
195	200	205
Glu Lys Thr Leu Ser Pro Arg Glu Leu	Trp His Leu Val His Gln Cys	
210	215	220
Tyr Gly Ser Glu Leu Gly Leu Thr Ser	Glu Asp Glu Asp Tyr Val Ser	
225	230	235
Pro Leu Gln Leu Asn Gly Leu Gly Thr	Pro Lys Glu Val Gly Asp Val	
245	250	255
Ile Ala Leu Ser Asp Ile Thr Ser Ser	Gly Ala Ala Asp Arg Ser Gln	
260	265	270
Glu Pro Ser Pro Val Gly Ser Arg Arg	Gly His Val Thr Pro Asn Leu	
275	280	285
Ser Arg Ala Ser Ser Asp Ala Asp His	Gly Ala Glu Glu Asp Lys Glu	
290	295	300
Glu Gln Val Asp Ser Gln Pro Asp Ala	Ser Ser Ser Gln Thr Val Thr	
305	310	315
Pro Val Ala Glu Pro Pro Ser Thr Glu	Pro Thr Gln Pro Asp Gly Pro	
325	330	335
Thr Thr Leu Gly Pro Leu Asp Leu Leu	Pro Ser Glu Glu Leu Leu Thr	
340	345	350
Asp Thr Ser Asn Ser Ser Ser Ser Thr	Gly Glu Glu Ala Asp Leu Ala	
355	360	365
Ala Leu Leu Pro Asp Leu Ser Gly		
370	375	

&lt;210&gt; 3281

&lt;211&gt; 842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

gaattctgcc ttgccgtgtg cctcattggc caaaggaaag caacagagtc tgcagccagg  
60  
gcaggaccgc caggaggggc ctggaccgcg ggggctcctg gcagcgctgt gcctttctga  
120  
ggcaaggagg tagagccagc ggctgaggac ctgtcagggc cagtcccagc tctgcagctt  
180  
gctgtgtgac ctggcacaca tcctctccct gctccctca gtctcttccc ctgcaagacg  
240  
gggtcctgac acggatctca tgggattgct ctgaggccca ggcagtccca ggctcaacca  
300  
ctggttcaca aagtgtgttg tttccaggaa gaacagatgg gggcgctga gggcaaaggg  
360

cctgagtgtg ggtcgaggat atgccggctg ctcgctcagg ggctggggtt tcattctgtg  
420  
tgtcttgaca ggggtgtgaca cttggcacca cactgttccc tgtcccttca tggatgtggc  
480  
ccacatgatg ttcctttcct cttgcaaaag aagttgctgg aaggccact gtccagcagc  
540  
ccccagggtg cctggggccac ggtgcctttg tgggcccagc tacaaggagg acttgcaggc  
600  
tcgtgtcttg gacagatact ggcgccaggg ccaagtgaag cccgggattg gtgggcatct  
660  
ctagctggtc cctgagagag ggtggagggt gctgacaggc cttggcgctt tcattctgtc  
720  
actccagagg cccttgtgct tgcagcaggg aggtcaaggc cagggcgctt gaccccgcc  
780  
gctcctccac actgagcctc ctgcacgtgc tcacaggtag agaagcggcg ggtcaatctg  
840  
tc  
842

&lt;210&gt; 3282

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3282

Met	Pro	Thr	Asn	Pro	Gly	Leu	His	Leu	Ala	Leu	Ala	Pro	Val	Ser	Val
1				5				10					15		
Pro	Asp	Thr	Ser	Leu	Gln	Val	Leu	Leu	Val	Ala	Gly	Pro	Thr	Lys	Ala
			20					25					30		
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
		35				40					45				
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50				55					60					
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70					75					80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85					90					95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
		100					105					110			
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala	
	115					120					125				
Ser	Glu	Gln	Ser	His	Glu	Ile	Arg	Val	Arg	Thr	Pro	Ser	Cys	Arg	Gly
	130				135					140					
Arg	Asp														
145															

&lt;210&gt; 3283

&lt;211&gt; 3268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3283

nggatcagag cggctgtggt gctccagaaa cattaccgca tgcagagggc ccgccaggcc  
60

taccagaggg tccgcagagc tgccgttggt atccaggcct tcacccggng ccatgtttgt  
120  
gcggagaacc taccgccagt cctcatggag cacaaggcca ccaccatcca gaagcacgtg  
180  
cggggctgga tggcacgcag gcacttccag cggctgcggg atgcagccat tgtcatccag  
240  
tgtgccttcc ggatgctcaa ggccaggcgg gagctgaagg ccctcaggat tgaggcccg  
300  
tcagcagagc atctgaaacg tctcaacgtg ggcatggaga acaaggtggt ccagctgcag  
360  
cggaagatcg atgagcagaa caaagagttc aagacacttt cagagcagtt gtccgtgacc  
420  
acctcaacat acaccatgga ggtagagcgg ctgaagaagg agctggtgca ctaccagcag  
480  
agcccagggtg aggacaccag cctcaggctg caggaggagg tggagagcct gcgcacagag  
540  
ctgcagaggg ccactcggga gcgcaagatc ttggaggacg ccacacagcag ggagaaagat  
600  
gagctgagga agcgagttgc agacctggag caagaaaatg ctctcttgaa agatgagaaa  
660  
gaacagctca acaaccaa at cctgtgccag tctaaagatg aatttgccca gaactctgtg  
720  
aaggaaaatc tcctcatgaa gaaagaactg gaggaggagc gatcccggtg ccagaacctt  
780  
gtgaaggaat attcacagtt ggagcagaga tacgacaacc ttcgggatga aatgaccatc  
840  
ataaagcaaa ctccagggtca taggcggaac ccatcaaacc aaagtagctt agaactctgac  
900  
tccaattacc cctccatctc cacatctgag atcggagaca ctgaggatgc cctccagcag  
960  
gtggaggaaa ttggcctgga gaaggcagcc atggacatga cggctcttct gaagctgcag  
1020  
aagagagtac gggagctgga gcaggagagg aaaaagctgc aagtgcagct ggagaagaga  
1080  
gaacagcagg acagcaagaa agtccaggcg gaaccaccac agactgacat agatttggac  
1140  
ccgaatgcag atctggccta caatagtctg aagaggcaag agctggagtc agagaacaaa  
1200  
aagctgaaga atgacctgaa tgagctgagg aaagccgtgg ccgaccaagc cacgcagaat  
1260  
aactccagcc acggctcccc agatagctac agcctcctgc tgaaccagct caagctggcc  
1320  
cacgaggagc tcgagggtcg caaggaggag gtgctcatcc tcaggaccca gatcgtgagc  
1380  
gccgaccagc ggcgactcgc cggcaggaac gcggagccga acattaatgc cagatcaagt  
1440  
tggcctaaca gtgaaaggca tgttgaccag gaggatgcc a ttgaggccta tcacgggggtc  
1500  
tgccagacaa acaggctgct ggaggctcag ctgcaggccc agagcctgga gcatgaggag  
1560  
gaggtggagc atctcaaggc tcagctcgag gccctgaagg aggagatgga caaacagcag  
1620  
cagaccttct gccagacgt actgctctcc ccagaggccc aggtggaatt cggcgttcag  
1680

caggaaatat cccggctgac caacgagaat ctggacctta aagaactggt agaaaagctg  
1740  
gaaaagaatg agaggaagct caaaaagcaa ctgaagattt acatgaagaa agcccaggac  
1800  
ctagaagctg cccaggcatt ggcccagagt gagaggaagc gccatgagct caacaggcag  
1860  
gtcacgggtcc agcggaaaga gaaggatttc cagggcatgc tggagtacca caaagaggac  
1920  
gagggccctcc tcatccggaa cctgggtgaca gacttgaagc cccagatgct gtcgggcaca  
1980  
gtgcccctgct tccccgccta catcctctac atgtgcatcc ggcacgcgga ctacaccaac  
2040  
gacgatctca aggtgcactc cctgctgacc tccaccatca acggcattaa gaaagtcctg  
2100  
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2160  
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2220  
cagaatgaac actgtcttaa gaattttgac ctcaccgaat accgtcaggt gctgagtga  
2280  
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2340  
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2400  
ggctaccgga agcgtcctc cagcatggca gatggggata actcatactg cctggaagct  
2460  
atcatccgcc agatgaatgc ctttcataca gtcattgtgt accagggctt ggaccctgag  
2520  
atcatcctgc aggtattcaa acagctcttc tacatgatca acgcagtga ctttaacaac  
2580  
ctgctcttgc ggaaggacgt ctgctcttgg agcacaggca tgcaactcag gtacaatata  
2640  
agtcagcttg aggagtggct tcggggaaga aaccttcacc agagtggagc agttcagacc  
2700  
atggaacctc tgatccaagc agcccagctc ctgcaattaa agaagaaaac ccaggaggac  
2760  
gcagaggcta tctgctccct gtgtacctcc ctcagcacc cagcagattgt caaaatttta  
2820  
aacctttata ctcccctgaa tgaatttgaa gaacgggtaa cagtggcctt tatacgaaca  
2880  
atccaggcac aactacaaga gcggaatgac cctcagcaac tgctattaga tgccaagcac  
2940  
atgtttcctg ttttgtttcc atttaatcca tcttctctaa ccatggactc aatccacatc  
3000  
ccagcgtgtc tcaatctgga attcctcaat gaagtctgaa gatgcatggt tccagcatta  
3060  
gtttgattcc caatgtgagc aagaaggaag tatatacagt aaagtaaatt caaggatctg  
3120  
ttaaactctg taaaagtaga tcaaatacaga gattgacagc ctgtggaggg tgctgaacta  
3180  
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3240  
ttgaaatatg aaaaaaaaaa aaaaaaaaaa  
3268

<210> 3284  
 <211> 1012  
 <212> PRT  
 <213> Homo sapiens

<400> 3284

Xaa	Ile	Arg	Ala	Ala	Val	Val	Leu	Gln	Lys	His	Tyr	Arg	Met	Gln	Arg
1				5					10					15	
Ala	Arg	Gln	Ala	Tyr	Gln	Arg	Val	Arg	Arg	Ala	Ala	Val	Val	Ile	Gln
			20					25					30		
Ala	Phe	Thr	Arg	Xaa	His	Val	Cys	Ala	Glu	Asn	Leu	Pro	Pro	Val	Leu
			35				40					45			
Met	Glu	His	Lys	Ala	Thr	Thr	Ile	Gln	Lys	His	Val	Arg	Gly	Trp	Met
	50					55					60				
Ala	Arg	Arg	His	Phe	Gln	Arg	Leu	Arg	Asp	Ala	Ala	Ile	Val	Ile	Gln
65					70				75					80	
Cys	Ala	Phe	Arg	Met	Leu	Lys	Ala	Arg	Arg	Glu	Leu	Lys	Ala	Leu	Arg
				85					90					95	
Ile	Glu	Ala	Arg	Ser	Ala	Glu	His	Leu	Lys	Arg	Leu	Asn	Val	Gly	Met
			100					105					110		
Glu	Asn	Lys	Val	Val	Gln	Leu	Gln	Arg	Lys	Ile	Asp	Glu	Gln	Asn	Lys
	115					120					125				
Glu	Phe	Lys	Thr	Leu	Ser	Glu	Gln	Leu	Ser	Val	Thr	Thr	Ser	Thr	Tyr
	130					135					140				
Thr	Met	Glu	Val	Glu	Arg	Leu	Lys	Lys	Glu	Leu	Val	His	Tyr	Gln	Gln
145					150				155					160	
Ser	Pro	Gly	Glu	Asp	Thr	Ser	Leu	Arg	Leu	Gln	Glu	Glu	Val	Glu	Ser
				165				170						175	
Leu	Arg	Thr	Glu	Leu	Gln	Arg	Ala	His	Ser	Glu	Arg	Lys	Ile	Leu	Glu
			180				185						190		
Asp	Ala	His	Ser	Arg	Glu	Lys	Asp	Glu	Leu	Arg	Lys	Arg	Val	Ala	Asp
	195					200					205				
Leu	Glu	Gln	Glu	Asn	Ala	Leu	Lys	Asp	Glu	Lys	Glu	Gln	Leu	Asn	
	210					215				220					
Asn	Gln	Ile	Leu	Cys	Gln	Ser	Lys	Asp	Glu	Phe	Ala	Gln	Asn	Ser	Val
225				230					235					240	
Lys	Glu	Asn	Leu	Leu	Met	Lys	Lys	Glu	Leu	Glu	Glu	Glu	Arg	Ser	Arg
				245				250						255	
Tyr	Gln	Asn	Leu	Val	Lys	Glu	Tyr	Ser	Gln	Leu	Glu	Gln	Arg	Tyr	Asp
			260					265					270		
Asn	Leu	Arg	Asp	Glu	Met	Thr	Ile	Ile	Lys	Gln	Thr	Pro	Gly	His	Arg
	275					280						285			
Arg	Asn	Pro	Ser	Asn	Gln	Ser	Ser	Leu	Glu	Ser	Asp	Ser	Asn	Tyr	Pro
	290				295						300				
Ser	Ile	Ser	Thr	Ser	Glu	Ile	Gly	Asp	Thr	Glu	Asp	Ala	Leu	Gln	Gln
305					310					315				320	
Val	Glu	Glu	Ile	Gly	Leu	Glu	Lys	Ala	Ala	Met	Asp	Met	Thr	Val	Phe
				325				330						335	
Leu	Lys	Leu	Gln	Lys	Arg	Val	Arg	Glu	Leu	Glu	Gln	Glu	Arg	Lys	Lys
			340					345				350			
Leu	Gln	Val	Gln	Leu	Glu	Lys	Arg	Glu	Gln	Gln	Asp	Ser	Lys	Lys	Val
	355					360					365				
Gln	Ala	Glu	Pro	Pro	Gln	Thr	Asp	Ile	Asp	Leu	Asp	Pro	Asn	Ala	Asp

370	375	380
Leu Ala Tyr Asn Ser	Leu Lys Arg Gln Glu	Leu Glu Ser Glu Asn Lys
385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln
405	410	415
Ala Thr Gln Asn Asn Ser Ser His Gly Ser Pro Asp Ser Tyr Ser Leu		
420	425	430
Leu Leu Asn Gln Leu Lys Leu Ala His Glu Glu Leu Glu Val Arg Lys		
435	440	445
Glu Glu Val Leu Ile Leu Arg Thr Gln Ile Val Ser Ala Asp Gln Arg		
450	455	460
Arg Leu Ala Gly Arg Asn Ala Glu Pro Asn Ile Asn Ala Arg Ser Ser		
465	470	475
Trp Pro Asn Ser Glu Arg His Val Asp Gln Glu Asp Ala Ile Glu Ala		
485	490	495
Tyr His Gly Val Cys Gln Thr Asn Arg Leu Leu Glu Ala Gln Leu Gln		
500	505	510
Ala Gln Ser Leu Glu His Glu Glu Val Glu His Leu Lys Ala Gln		
515	520	525
Leu Glu Ala Leu Lys Glu Glu Met Asp Lys Gln Gln Thr Phe Cys		
530	535	540
Gln Thr Leu Leu Leu Ser Pro Glu Ala Gln Val Glu Phe Gly Val Gln		
545	550	555
Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu		
565	570	575
Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys		
580	585	590
Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala		
595	600	605
Gln Ser Glu Arg Lys Arg His Glu Leu Asn Arg Gln Val Thr Val Gln		
610	615	620
Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp		
625	630	635
Glu Ala Leu Leu Ile Arg Asn Leu Val Thr Asp Leu Lys Pro Gln Met		
645	650	655
Leu Ser Gly Thr Val Pro Cys Leu Pro Ala Tyr Ile Leu Tyr Met Cys		
660	665	670
Ile Arg His Ala Asp Tyr Thr Asn Asp Asp Leu Lys Val His Ser Leu		
675	680	685
Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys Val Leu Lys Lys His Asn		
690	695	700
Asp Asp Phe Glu Met Thr Ser Phe Trp Leu Ser Asn Thr Cys Arg Leu		
705	710	715
Leu His Cys Leu Lys Gln Tyr Ser Gly Asp Glu Gly Phe Met Thr Gln		
725	730	735
Asn Thr Ala Lys Gln Asn Glu His Cys Leu Lys Asn Phe Asp Leu Thr		
740	745	750
Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln		
755	760	765
Leu Ile Lys Ile Ala Glu Gly Val Leu Gln Pro Met Ile Val Ser Ala		
770	775	780
Met Leu Glu Asn Glu Ser Ile Gln Gly Leu Ser Gly Val Lys Pro Thr		
785	790	795
Gly Tyr Arg Lys Arg Ser Ser Ser Met Ala Asp Gly Asp Asn Ser Tyr		

805 810 815  
 Cys Leu Glu Ala Ile Ile Arg Gln Met Asn Ala Phe His Thr Val Met  
 820 825 830  
 Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln  
 835 840 845  
 Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg  
 850 855 860  
 Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile  
 865 870 875 880  
 Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly  
 885 890 895  
 Ala Val Gln Thr Met Glu Pro Leu Ile Gln Ala Ala Gln Leu Leu Gln  
 900 905 910  
 Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu Ala Ile Cys Ser Leu Cys  
 915 920 925  
 Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr  
 930 935 940  
 Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr  
 945 950 955 960  
 Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp Pro Gln Gln Leu Leu Leu  
 965 970 975  
 Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser  
 980 985 990  
 Leu Thr Met Asp Ser Ile His Ile Pro Ala Cys Leu Asn Leu Glu Phe  
 995 1000 1005  
 Leu Asn Glu Val  
 1010

&lt;210&gt; 3285

&lt;211&gt; 1518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3285

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&lt;210&gt; 3286

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

Met	Lys	Ser	His	Pro	Gly	Gln	Lys	Thr	Val	His	Phe	Ser	Lys	Thr	Glu
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			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
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Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
	50				55						60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65				70					75					80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85				90						95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
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Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

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 <212> DNA  
 <213> Homo sapiens

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 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3288  
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<400> 3290																
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Pro	Cys	Lys	Ala	Arg	Leu	Leu	Leu	Pro	Lys	Gly	Trp	Gly	Asp	Val	Leu	
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Gly	Ser	Leu	Thr	Gln	Cys	Arg	Arg	Ala	Trp	Val	Pro	Pro	Trp	Thr	Gln	

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<211> 102  
<212> PRT  
<213> Homo sapiens

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Trp Ser Ala Thr Pro Gly Pro Pro Trp Ala Pro Ser Pro Ala Thr Pro  
35 40 45  
Ala Val Arg Leu Pro Ala Pro Ser Pro Thr Ile Ala Ala Ser Val Pro  
50 55 60  
Pro His Trp Leu Phe Thr Trp Leu Ala Val Ser Val Ser Gln Pro Gly  
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Thr Pro Pro Ser Leu Pro  
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<212> DNA  
<213> Homo sapiens

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu	35	40	45	
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala	50	55	60	
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser	65	70	75	80
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg	85	90	95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr	100	105	110	
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys	115	120	125	
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro	130	135	140	
Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr	145	150	155	160
Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val	165	170	175	
Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val	180	185	190	
Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys	195	200	205	
Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly	210	215	220	
Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met	225	230	235	240
Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	Glu	Thr	Gly	Lys	Asp	Arg	Glu	245	250	255	
Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	Gly	Trp	Phe	Thr	Met	Val	Ile	Ala	260	265	270	
Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn	275	280	285	
Tyr	Cys	Ser	Gln	Arg	Pro	Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr	290	295	300	
Glu	Pro	Lys	Gly	Pro	Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His	305	310	315	320
Ser	Arg	Lys	Gly	Asn	His	His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe	325	330	335	
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 <213> Homo sapiens

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<210> 3296  
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 <212> PRT  
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 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly  
 35 40 45  
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly  
 50 55 60  
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr  
 65 70 75 80  
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu  
 85 90 95  
 Ser Asp Lys Asp Ala Leu Glu Asp His Met Asp Gly His Phe Phe Phe  
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 Ser Thr Gln Gly Pro Leu His Leu

115

120

&lt;210&gt; 3297

&lt;211&gt; 3176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

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<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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<213> Homo sapiens

<400> 3299

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&lt;210&gt; 3300

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

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Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe			
50	55	60	
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe			
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Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg			
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Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe			
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Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys			
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180	185	190	
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&lt;210&gt; 3301

&lt;211&gt; 2109

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

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&lt;210&gt; 3302

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 <212> PRT  
 <213> Homo sapiens

<400> 3302

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      50           55           60
Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
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Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
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Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro
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      115          120          125
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      165          170          175
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      180          185          190
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      195          200          205
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225          230          235          240
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Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
      275          280          285
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<400> 3303

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<210> 3304

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3304

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			100				105						110		
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&lt;210&gt; 3306

<211> 319  
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225				230				235					240		
Thr	Tyr	Ser	Ile	Ser	Ser	Ser	Leu	Thr	Ala	Glu	Pro	Gly	Leu	Cys	Arg
			245				250						255		
Cys	His	Leu	His	Leu	Pro	Gly	His	Thr	His	Leu	Ser	Gly	Gly	Ala	Pro
		260					265					270			
Trp	Gly	Gln	His	Pro	Gly	Cys	Pro	Thr	Arg	Ala	Glu	Asn	Ser	Leu	Gly
	275					280						285			
Ser	His	Leu	Cys	Gln	Gln	Ser	Leu	Pro	Ser	Cys	Thr	Asp	Val	Pro	Gly
	290				295					300					
Ala	Ser	Glu	Thr	Ala	Ser	Thr	Tyr	Arg	Thr	Trp	Ala	Ala	Ser	Gly	
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<210> 3307  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 3307

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

Met	Gly	Leu	Pro	Arg	Ala	Leu	Ala	Leu	Pro	Ser	Gly	Gly	Arg	Ser	Gly
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Ser	Leu	His	Pro	Asp	Pro	Gly	Ala	Ser	Leu	Pro	Cys	Pro	Val	Leu	Ile
			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35					40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55					60				
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65					70					75				80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
			85					90						95	
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105						110	

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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 420  
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<210> 3310  
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 <212> PRT  
 <213> Homo sapiens

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 Ala Gln Leu Glu Glu Gln Phe Tyr Leu Gln Ala Leu Lys Leu Pro Asn  
 35 40 45  
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val  
 50 55 60  
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly  
 65 70 75 80  
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu  
 85 90 95  
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala  
 100 105 110  
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg  
 115 120 125  
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val  
 130 135 140  
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr  
 145 150 155 160  
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala  
 165 170 175  
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg  
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 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu  
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 Thr Asn  
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<210> 3311  
 <211> 486  
 <212> DNA  
 <213> Homo sapiens

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 486

&lt;210&gt; 3312

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3312

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Ala	Glu	Gly	Gly	Tyr	Gln	Arg	Tyr	Gly	Val	Arg	Ser	Tyr	Leu	His	Gln
		20						25				30			
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
		35					40				45				
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
		50				55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70					75				80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
				85					90					95	
Asp	Phe	Val	Val	Val	Asp										
				100											

&lt;210&gt; 3313

&lt;211&gt; 1791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3313

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420  
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1680  
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1791

&lt;210&gt; 3314

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3314

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 20 25 30  
 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly  
 35 40 45  
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His  
 50 55 60  
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu  
 65 70 75 80  
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr  
 85 90 95  
 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu  
 100 105 110  
 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp  
 115 120 125  
 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr  
 130 135 140  
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly  
 145 150 155 160  
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr  
 165 170 175  
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg  
 180 185 190  
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu  
 195 200 205  
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp  
 210 215 220  
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr  
 225 230 235 240  
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys  
 245 250 255  
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala  
 260 265 270  
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser  
 275 280 285  
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg  
 290 295 300  
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser  
 305 310 315 320  
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly  
 325 330 335  
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys  
 340 345 350  
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly  
 355 360 365  
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val  
 370 375 380  
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys  
 385 390 395 400  
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

				405					410					415					
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			420					425					430						
Phe	Thr	Ser	Ala	Gly	Gln	Ala	Ser	Lys	Asn	Ile	Ile	Gln	Pro	Pro	Ser				
		435					440					445							
Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr				
	450					455					460								
Phe	Thr	Lys	Leu	Cys	Asn	Asp	His	Glu	Val	Leu	Thr	Phe	Ile	Lys	Tyr				
465					470				475						480				
Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu				
			485					490						495					
Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn				
			500				505						510						
His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys				
		515				520						525							
Leu	Cys	Phe	Ser	Thr	Ser	Ser	His	Leu											
	530					535													

&lt;210&gt; 3315

&lt;211&gt; 934

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3315

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780
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900

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<212> PRT  
<213> Homo sapiens

<400> 3316

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Ser	Ile	His	Arg	Ala	Leu	His	Ile	Tyr	Gln	Gly	Asn	Ile	Lys	Ile	Tyr
			20					25					30		
Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro	Glu	Val	Val	Leu
		35					40					45			
Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu	Val	Val	Lys	Lys
	50					55				60					
Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg	Leu	Phe	Ala	Val
65					70					75					80
Val	His	Phe	Ala	Ser	Arg	Gln	Trp	Lys	Val	Thr	Ser	Glu	Asp	Leu	Ile
				85					90					95	
Leu	Ile	Gly	Asn	Glu	Leu	Asp	Leu	Ala	Cys	Gly	Glu	Arg	Ile	Arg	Leu
			100					105					110		
Glu	Lys	Val	Leu	Leu	Val	Gly	Ala	Asp	Asn	Phe	Thr	Leu	Leu	Gly	Lys
		115				120						125			
Pro	Leu	Leu	Gly	Lys	Asp	Leu	Val	Arg	Val	Glu	Ala	Thr	Val	Ile	Glu
	130					135					140				
Lys	Thr	Glu	Ser	Trp	Pro	Arg	Ile	Ile	Met	Arg	Phe	Arg	Lys	Arg	Lys
145					150					155					160
Asn	Phe	Lys	Lys	Lys	Arg	Ile	Val	Thr	Thr	Pro	Gln	Thr	Val	Leu	Arg
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Ile	Asn	Ser	Ile	Glu	Ile	Ala	Pro	Cys	Leu	Leu					
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<210> 3317  
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<212> DNA  
<213> Homo sapiens

<400> 3317

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caagtgctac gttatgaagc tgccaaatta agaacactga gcaaagttaa ttctcccgta  
240  
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420

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 660  
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 780  
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 840  
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 900  
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 960  
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 1020  
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 1200  
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 1260  
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 1665

&lt;210&gt; 3318

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3318

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Leu	Glu	Tyr	Ile	Lys	Asn	Arg	Lys	Leu	Glu	Lys	Gln	Arg	Ile	Arg	Glu
		20					25					30			
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu	

35	40	45
Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys		
50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
225	230	235
Lys Asn Val Ser Gly Cys Leu Lys Val Gln Ala Ala Cys		
245	250	

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 <212> DNA  
 <213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys
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Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3324

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Pro	Asp	Glu	Gly	Gln	Glu	Leu	Glu	Glu	Val	Gln	Ala	Glu	Leu	Lys	
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&lt;213&gt; Homo sapiens

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Thr Gln Gln Gln Gln Gln Lys Leu Arg Leu Gln Arg Ile Gln Met  
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Glu Arg Glu Arg Ile Arg Met Arg Gln Glu Glu Leu Met Arg Gln Glu  
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Ala Ala Leu Cys Arg Gln Leu Pro Met Glu Ala Glu Thr Leu Ala Pro  
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<212> DNA  
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<210> 3328

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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 Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His  
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 Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln  
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&lt;210&gt; 3329

&lt;211&gt; 705

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3329

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<213> Homo sapiens
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<212> PRT  
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<400> 3332  
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<400> 3334  
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 Tyr Leu Thr Met Thr Ile Ile Ser Val Thr Leu Glu Ile Pro His His  
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 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln  
 165 170 175  
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 195 200 205  
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 225 230 235 240  
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 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser  
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<212> DNA
<213> Homo sapiens
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&lt;210&gt; 3336

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3336

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		20						25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
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&lt;210&gt; 3337

&lt;211&gt; 679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3337

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<210> 3338  
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 <212> PRT  
 <213> Homo sapiens

<400> 3338  
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 35 40 45  
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro  
 50 55 60  
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu  
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<210> 3339  
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 <213> Homo sapiens

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<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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		20						25				30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55					60				
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 240  
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 300  
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 360  
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 420  
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 480  
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&lt;210&gt; 3342

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3342

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Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
		20						25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
		35					40					45			
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Phe	Tyr	Gln	
	50					55				60					
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65				70				75						80	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85				90							95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

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<210> 3343
<211> 594
<212> DNA
<213> Homo sapiens
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240
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420
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<210> 3344  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 3344  
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 35 40 45  
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys  
 50 55 60  
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala  
 65 70 75 80  
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr  
 85 90 95  
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser  
 100 105 110  
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr  
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 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu  
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<210> 3345  
 <211> 1149  
 <212> DNA  
 <213> Homo sapiens

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 1149

&lt;210&gt; 3346

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3346

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
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Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
		20						25				30			
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
	35						40				45				
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50				55						60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65				70					75					80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85					90					95		
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100						105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115						120					125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145				150						155				160	
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165					170					175		
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180					185						190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
	195					200						205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210				215						220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

225		230		235		240
Gln Tyr Tyr Cys Ser	His Cys His Trp	Asn Asp Leu	Ala Val Ile	Pro		
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 <211> 2267  
 <212> DNA  
 <213> Homo sapiens

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 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 3348

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			20					25					30		
Gln	Val	Ala	Trp	Tyr	Asn	Glu	Leu	Leu	Pro	Pro	Ala	Phe	His	Leu	Pro
		35					40				45				
Leu	Pro	Gly	Pro	Thr	Leu	Ala	Phe	Leu	Val	Leu	Ser	Thr	Pro	Ala	Met
	50					55					60				
Phe	Asp	Arg	Ala	Leu	Lys	Pro	Phe	Leu	Gln	Ser	Cys	His	Leu	Arg	Met
65					70					75				80	
Leu	Thr	Asp	Pro	Val	Asp	Gln	Cys	Val	Ala	Tyr	His	Leu	Gly	Arg	Val
				85					90					95	
Gly	Glu	Ser	Leu	Pro	Glu	Leu	Gln	Ile	Glu	Ile	Ile	Ala	Asp	Tyr	Glu
			100					105						110	

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His  
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 Val Ala Gly Ala Ala Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp  
 130 135 140  
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe  
 145 150 155 160  
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu  
 165 170 175  
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg  
 180 185 190  
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp  
 195 200 205  
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu  
 210 215 220  
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu  
 225 230 235 240  
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu  
 245 250 255  
 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala  
 260 265 270  
 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro  
 275 280 285

&lt;210&gt; 3349

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3349

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 aagaagctgt ttgaagagga gaaattgctg agacaagaag gaaaattaga gaagatccag  
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 720

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 780  
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 840  
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 900  
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 960  
 tgttttagctt cttcctccat tggagtttat tgggacaaac aggagagcca gccattgtct  
 1020  
 ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa  
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<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

Gly	Pro	Gly	Arg	Gly	Ala	Ser	Ser	Gln	Ala	Asp	Val	Gly	Val	Arg	Gly
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			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35					40					45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50					55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85					90					95		
Ala	Arg	His	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr	
			100				105					110			
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115					120					125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
	130					135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145					150					155				160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
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<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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 120

atgatgctct tagctccaat aattcatggg ggcaagcaca gtgaacgaca tcctgccctc  
180  
gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggtg ttgtaccacc tggacatcta  
240  
cttcagcagc cagctgcaga gcgcgcccgt gcccatcgtg gacaagggcc ccgtggagct  
300  
gctggaggag ttcgtgttcc aggtgcccac ggagcgcagc gcgcagccca agagactgaa  
360  
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420  
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480  
tgacagccgg atgagcttgt tgggaaaact ggtctccatg gcggtggctg tgtgtcgaat  
540  
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600  
gttagccaag gcccttgtag atgactactg ctggttggtg ccgggatcca ttcagacgct  
660  
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720  
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900  
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960  
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1020  
ctcaaaactc cacctcagcg tcctgcaagt gctcatgacg ctgcagctgc acctgaccga  
1080  
gaagaatctg tatgggcgcc tggggctgat cctcttcgac cacatggtcc cgctggtaga  
1140  
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1200  
ctcgtgggac cggtgggcgc aggtctgca ggtggccatg gcctcaggag ctctgctgtg  
1260  
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1320  
ggtgatctcg ggtcccgtgc agcagtcgcc tcacgcgcg ctccccccgg ggttctaccc  
1380  
ccacatccac acgccccgcg tgggctacgg ggctgtcccc cc  
1422

&lt;210&gt; 3352

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3352

Met	Trp	Pro	Ser	Gln	Leu	Leu	Ile	Phe	Met	Met	Leu	Leu	Ala	Pro	Ile
1				5				10					15		
Ile	His	Gly	Gly	Lys	His	Ser	Glu	Arg	His	Pro	Ala	Leu	Ala	Ala	Ala

```

                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
   35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
   50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
   65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
   85                90                95
Ser

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<210> 3353  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

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<400> 3353
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120
ggctccctac ctgacctcac caacctgcac tttccccccac cactgcccac cccctggac
180
cctgaagaga cagcctaccc tagcctgagt ggggggcaaca gtacctcaa tttgaccac
240
accatgactc acctgggcat cagcaggggc atgggccttg gcccaggcta tgatgcacca
300
gggcgtcccc ctggatacca gtaaactgtc cactgaccag cggttaccac cataccata
360
cagttcccca agtttggtnt ctgcttaccac agccccacac cccaaagttt taacagcagc
420

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<210> 3354  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

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<400> 3354
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  1                5                10                15
Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
   20                25                30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
   35                40                45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
   50                55                60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
   65                70                75                80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
   85                90                95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
   100                105

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<210> 3355  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 3355  
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 120  
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagaggtca gctagaagac  
 180  
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag  
 240  
 gaggacatct ctgcttgccct gcaggggacc catggctttc gaaaagagga atcgctcgcc  
 300  
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa  
 360  
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac  
 420  
 ttgcagtac acgagataaa catcaaacac ctacaaggag ttgggagatc tttc  
 474

<210> 3356  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 3356  
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 1 5 10 15  
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 20 25 30  
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln  
 35 40 45  
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His  
 50 55 60  
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His  
 65 70 75 80  
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu  
 85 90 95  
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr  
 100 105 110  
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly  
 115 120 125  
 Arg Ser Phe  
 130

<210> 3357  
 <211> 2268  
 <212> DNA  
 <213> Homo sapiens

<400> 3357

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agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg  
120  
agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga  
180  
aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttggcca cttgaatgat  
240  
tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg  
300  
cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggctctgcg  
360  
gtgtcgggtg tgctgggtgg ggcgagagg aaccgggtgg atcgtctccc gagcctgctc  
420  
ctgccgccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga  
480  
agaaacatta ccaaggtcct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc  
540  
acagccaaaa aactgggtgt acagactgtg gcggtttata gtgaggctga cagaaattcc  
600  
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660  
tacctatcta tggagaaaat cattcaagtg gccaaagacct ctgctgcaca ggctatccat  
720  
ccaggatgcg gttttctttc agaaaacatg gaatttgctg aactttgtaa gcaagaagga  
780  
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900  
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960  
gtccgggggtg gaggaggaaa aggaatgagg attgttagat cagaacaaga atttcaagaa  
1020  
cagttagagt cagcacggag agaagctaag aagtctttca atgatgatgc tatgctgatc  
1080  
gagaagtttg tagacacacc gaggcattga gaagtccagg tgtttggtga tcacatggc  
1140  
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1260  
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1320  
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1380  
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1440  
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1560  
actcctcgag cagacccttc caccaggatt gaaactggag tacggcaagg agacgaagtt  
1620

tccgtgcatt atgaccccat gattgcgaag ctggctcgtgt gggcagcaga tcgccaggcg  
 1680  
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 1740  
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 1860  
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 1920  
 actcttcagg cacatgatca attctctcca ttttcgtcta gcagtgggaag aagactgaat  
 1980  
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 2040  
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 2100  
 ttccagacca ctacaataaa atgtagccat agctgtaacg tataaccatg atgggtctta  
 2160  
 tagcatgcag attgaagata aaactttcca agtccttggt aatctttaca gcgagggaga  
 2220  
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 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25				30			
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala	
	35					40					45				
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65					70				75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
	115						120					125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145					150					155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180					185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

&lt;210&gt; 3359

&lt;211&gt; 652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3359

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120
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180
gggaggtaat taaaaaacag tggaatggaa aaacagtgcg gtagtcatcc tgtaatatgc
240
tccttgtaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
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 480  
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 540  
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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
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Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35					40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120						125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 420  
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 480  
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 540  
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 600  
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 660  
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 780  
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 1020  
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 1040

&lt;210&gt; 3362

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
			50			55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70				75					80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85				90					95		
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105					110			
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Val	Ala	Pro	His	Gly	Ile	Pro	
			115			120					125				
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Val	Pro	
			130			135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

```

145          150          155          160
Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro
          165          170          175
Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His
          180          185          190
Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Gly
          195          200          205
Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg
          210          215          220
Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His
225          230          235          240
Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr
          245          250

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<210> 3363  
 <211> 718  
 <212> DNA  
 <213> Homo sapiens

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<400> 3363
cagaaggacc ccaggatggc ggtcatcatg cccaggaacg ttggtgatgg ggaatgggtt
60
ggccagcatg atcagggacc ccgtcatgcc catgattttt tgggtggcat tggcgaccga
120
gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggccgcaac aacatctaaa cagaccactt ccaatacagc
240
cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
300
aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
360
aatcagtga tgtacaacc agccgagggg acggtgcata actctccatc agaagccctg
420
gggttctctg cccccgtga gccgcaggag gatgcgttgc ctgcagtga gacggccgtg
480
agctctgggc aaacctaac agagaccagt gtcccatgct ctttcttctt ggagcctgtc
540
atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta
600
ttccccaagc agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
660
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718

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<210> 3364  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

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<400> 3364
Met Gly His Trp Ser Leu Phe Arg Phe Ala Gln Ser Ser Arg Pro Ser
1          5          10          15
Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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	20		25		30
Pro Gly Leu Leu Met Glu Ser Tyr Ala Pro Ser Pro Arg Leu Gly Cys					
35		40		45	
Thr Phe Thr Asp Cys Gln Lys Phe Leu Ile Leu Leu Trp Gly Pro Gly					
50		55		60	
Lys Glu Ser Pro Thr Val Trp Ser Cys Pro Leu Asp Ser Thr His His					
65		70		75	80
Ser Gly Ser Asn Cys Thr Ser Leu Gly Ser Ser Ala Gly Cys Ile Gly					
	85		90		95
Ser Gly Leu Phe Arg Cys Cys Cys Gly Arg Thr Asp Ser Pro Arg Ala					
	100		105		110
Gly Gly Arg Gly Gly Arg Trp Gly Ala Ser Pro Val Gly Ser Gly Asp					
	115		120		125
Thr Pro Glu Leu Leu Gly Arg Gln Cys His Pro Lys Asn His Gly His					
	130		135		140
Asp Gly Val Pro Asp His Ala Gly Gln Pro Ile Pro His His Gln Arg					
145		150		155	160
Ser Trp Ala					

&lt;210&gt; 3365

&lt;211&gt; 2389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3365

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60  
tctcttccct tcttttccct tttccttccc tatttgaaat tggcatcgag ggggctaagt  
120  
tcgggtggca gcgcggggcg caacgcaggg gtcacggcga cggcggcggc ggctgacggc  
180  
tggaagggtta ggcttccctc accgctcgtc ctcttccctc gctccgctcg gtgtcaggcg  
240  
cggcggcggc gcggcggggc gacttcgtcc ctctcctcgc tccccccac accggagcgg  
300  
gcaactcttcg ctctgccatc ccccgaccct tcaccccgag gactgggcgc ctctcctggc  
360  
gcagctgagg gagcgggggc cggctctctg ctcggttggt gagcctccat gtcggataat  
420  
cagaactgga actcgtcggg ctcgaggagg gatccagaga cggagtctgg gccgcctgtg  
480  
gagcgtcgcg gggtcctcag taagtggaca aactacattc atgggtggca ggatcgttgg  
540  
gtagttttga aaaataatgc tctgagttac tacaaatctg aagatgaaac agagtatggc  
600  
tgcagaggat ccatctgtct tagcaaggct gtcacacac ctacgattt tgatgaatgt  
660  
cgatttgata ttagtgtaaa tgatagtgtt tggatatctc gtgctcagga tccagatcat  
720  
agacagcaat ggatagatgc cattgaacag cacaagactg aatctggata tggatctgaa  
780  
tccagcttgc gtcgacatgg ctcaatggtg tccctgggtg ctggagcaag tggctactct  
840

gcaacatcca cctcttcatt caagaaaggc cacagtttac gtgagaagtt ggctgaaatg  
900  
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc  
960  
tgtgctgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa  
1020  
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa  
1080  
gaaaagttat ttccacatgt gacaccaaaa ggaattaatg gtatagactt taaaggggaa  
1140  
gcgataactt ttaaagcaac tactgctgga atccttgcaa cactttctca ttgtattgaa  
1200  
ctaattggta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa  
1260  
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt  
1320  
ggaggaccag attatgaaga aggccctaac agtctgatta atgaagaaga gttctttgat  
1380  
gctgttgaag ctgctcttga cagacaagat aaaatagaag aacagtcaca gagtgaaaag  
1440  
gtgagattac attggcctac atccttgccc tctggagatg cttttcttc tgtggggaca  
1500  
catagatttg tccaaaagcc ctatagtcgc tcttcctcca tgtcttccat tgatctagtc  
1560  
agtgcctctg atgatgttca cagattcagc tcccaggttg aagagatggg gcagaaccac  
1620  
atgacttact cattacagga tgtaggcgga gatgccaatt ggcagttggg tgtagaagaa  
1680  
ggagaaatga aggtatacag aagagaagta gaagaaaatg ggattgttct ggatccttta  
1740  
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1800  
gttgacgttc gcaatgactg ggaaacaact atagaaaact ttcattgtggg ggaaacatta  
1860  
gctgataatg caatcatcat ttatcaaaca cacaagaggg tgtggcctgc ttctcagcga  
1920  
gacgtattat atctttctgt cattcgaaag ataccagcct tgactgaaaa tgaccctgaa  
1980  
acttggatag tttgtaattt ttctgtggat catgacagtg ctctctataa caaccgatgt  
2040  
gtccgtgcc aataaaatgt tgctatgatt tgtcaaacct tggtaagccc accagagggg  
2100  
aaccaggaaa ttagcagga caacattcta tgcaagatta catatgtagc taatgtgaac  
2160  
cctggaggat gggcaccagc ctcaagtgtta agggcagtg caaagcgaga gtatcctaaa  
2220  
tttctaaaac gttttacttc ttacgtccaa gaaaaaactg caggaaagcc tattttgttc  
2280  
tagtattaac aggtactaga agatatgttt tatctttttt taactttatt tgactaatat  
2340  
gactgtcaat actaaaattt agttgttgaa agtatttact atgtttttt  
2389

&lt;210&gt; 3366

<211> 624  
 <212> PRT  
 <213> Homo sapiens

<400> 3366

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Met Ser Asp Asn Gln Asn Trp Asn Ser Ser Gly Ser Glu Glu Asp Pro
 1           5           10           15
Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
      20           25           30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
      35           40           45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
      50           55           60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65           70           75           80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
      85           90           95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
      100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
      115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
      130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145           150           155           160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
      165          170          175          180
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
      180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
      195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
      210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225           230           235           240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
      245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
      260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
      275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
      290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305           310           315           320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
      325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
      340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
      355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
      370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

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385		390		395		400									
Val	Gln	Asn	His	Met	Thr	Tyr	Ser	Leu	Gln	Asp	Val	Gly	Gly	Asp	Ala
		405							410					415	
Asn	Trp	Gln	Leu	Val	Val	Glu	Glu	Gly	Glu	Met	Lys	Val	Tyr	Arg	Arg
		420							425					430	
Glu	Val	Glu	Glu	Asn	Gly	Ile	Val	Leu	Asp	Pro	Leu	Lys	Ala	Thr	His
		435							440					445	
Ala	Val	Lys	Gly	Val	Thr	Gly	His	Glu	Val	Cys	Asn	Tyr	Phe	Trp	Asn
		450												460	
Val	Asp	Val	Arg	Asn	Asp	Trp	Glu	Thr	Thr	Ile	Glu	Asn	Phe	His	Val
		465												480	
Val	Glu	Thr	Leu	Ala	Asp	Asn	Ala	Ile	Ile	Ile	Tyr	Gln	Thr	His	Lys
				485						490				495	
Arg	Val	Trp	Pro	Ala	Ser	Gln	Arg	Asp	Val	Leu	Tyr	Leu	Ser	Val	Ile
			500						505					510	
Arg	Lys	Ile	Pro	Ala	Leu	Thr	Glu	Asn	Asp	Pro	Glu	Thr	Trp	Ile	Val
		515							520					525	
Cys	Asn	Phe	Ser	Val	Asp	His	Asp	Ser	Ala	Pro	Leu	Asn	Asn	Arg	Cys
		530							535					540	
Val	Arg	Ala	Lys	Ile	Asn	Val	Ala	Met	Ile	Cys	Gln	Thr	Leu	Val	Ser
		545												560	
Pro	Pro	Glu	Gly	Asn	Gln	Glu	Ile	Ser	Arg	Asp	Asn	Ile	Leu	Cys	Lys
				565						570				575	
Ile	Thr	Tyr	Val	Ala	Asn	Val	Asn	Pro	Gly	Gly	Trp	Ala	Pro	Ala	Ser
			580						585					590	
Val	Leu	Arg	Ala	Val	Ala	Lys	Arg	Glu	Tyr	Pro	Lys	Phe	Leu	Lys	Arg
		595							600					605	
Phe	Thr	Ser	Tyr	Val	Gln	Glu	Lys	Thr	Ala	Gly	Lys	Pro	Ile	Leu	Phe
		610					615							620	

&lt;210&gt; 3367

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3367

acgcgtgcag gagaggagag gccaggagat agggagggca gtttgtggat tgaaatgacc  
60gagaattacg ccacagaggt gttggaggct ggcacgtggt catctcagga gcacggaggg  
120tgccttcccc acttcaggcc tcttagtgct aaggatgtga gaggcaaggg ctgctgggag  
180agtatttttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag  
240gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc  
300cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctgtt tccttcaggc  
360

accagg

366

&lt;210&gt; 3368

&lt;211&gt; 104

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3368

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Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1           5           10           15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
      20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
      35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
      50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
      65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
      85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
      100

```

<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

```

cttgttccag ggaaaagctt tcagcagcaa aggggaagcca tgaaacaaac catagaagaa
60
gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aagggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcatctg cagttcctca tacaaccgag agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaaatatg tcttttaagt cttcgtagac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttggac
840
ttgatctggc aaaaactgcc aataggagga ctgcccagca ctgcagcaag attgaggata
900

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agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac  
 960  
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 1020  
 gttcttgctt cattttggga ttctaaatgg aagctttcaa cagagcattc cattttgtcc  
 1080  
 tgttaaaacc ttttgttttc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac  
 1140  
 ttgtatacac aagcgtccat gtctcacaca aatattgatg tgattattct taagtgttaa  
 1200  
 atcattaaca cttaaatac ttcattggga atattgagca gagggactgt gcttctatgc  
 1260  
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttcctaaa  
 1320  
 aaggaaaaat aaaaaacaaa atgggtgccac tttgggttga agctactttg ttaggcttga  
 1380  
 attcatttat atgtcttttg attct  
 1405

&lt;210&gt; 3370

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3370

Leu	Val	Pro	Gly	Lys	Ser	Phe	Gln	Gln	Gln	Arg	Glu	Ala	Met	Lys	Gln
1				5				10						15	
Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50				55					60					
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70				75					80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85				90							95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115				120						125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135				140					
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145				150					155					160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170					175		
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180					185						190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195				200						205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser



50	55	60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile		
65	70	75
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro		80
	85	90
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp		95
	100	105
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp		110
	115	120
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro		125
	130	135
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys		140
145	150	155
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu		160
	165	170
Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr		175
	180	185
Arg Ser Cys Gly Tyr Ala		190
195		

&lt;210&gt; 3373

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3373

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 60  
 gggtcctcga acagaagcca gggctctgtgc ggcaccacc agctgctggg ccatggcgga  
 120  
 gtgttctggt gcgggccagc gcctgaccgg tgcgggcggc ctcaggagag gagagcttgc  
 180  
 tcagtgcgtc acgtagtcag ggctcaggct ggggcccggc tccagagcct ggtcacattc  
 240  
 ccaagcttca ttctcttcac ctgtgaattg caggcttccc tgggtgtgcc tgcacatgag  
 300  
 ggaagacaca cctgaagcac tgggtccctc catggccttg ggccgcagga accgtgggcg  
 360  
 cacgagcttg ggaaggacat gtcggaggcc ggcgcctgtg cgggcagaag ctgtgtcctc  
 420  
 cagcccttcc accaccagca tggtctcatt tccaggtttc tctgtttaaa aaacaaaagt  
 480  
 agcgcacatcgg tggctcttcac gacgtacacc cagaagcacc cgtccatcga ggacgggcct  
 540  
 ccgtttgtgg agccgctgct taacttcac tggttcctgc tgctggctgt ggacgggtgc  
 600  
 gtcttgggat cctgcagggg gagggggctg tgaatgtgcg gggtgtgtgt agacgtggtg  
 660  
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 720  
 atgcat  
 726

&lt;210&gt; 3374

<211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3374  
 Met Ser Glu Ala Gly Ala Cys Ala Gly Arg Ser Cys Val Leu Gln Pro  
 1 5 10 15  
 Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn  
 20 25 30  
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro  
 35 40 45  
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile  
 50 55 60  
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg  
 65 70 75 80  
 Gly Arg Gly Leu

<210> 3375  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 3375  
 acgcgtgcat acgtgatctc atgtttgcac acatgtgtcc atgcagatgc atgctctcac  
 60  
 gcacatgtgc ccacacactc agcactcaca ccccgctctg caggctcagc cccactcctg  
 120  
 agccacctgc ctgggctttg gggggcccagc cggcatgggg agccccaggc tccagctggc  
 180  
 ctcgcttggc tctgaaatct aggccaggat gcagagcccc cagtgcggcc agtggagccc  
 240  
 ctggtactgt gcgcagcccc cacctggcag ccccttttcc tgtcaaagcc cctcccagcg  
 300  
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 360  
 cttgcccagc atccccggcc tgcattctcac cag  
 393

<210> 3376  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 3376  
 Met Phe Ala His Met Cys Pro Cys Arg Cys Met Leu Ser Arg Thr Cys  
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 Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr  
 20 25 30  
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<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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2558

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&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3379

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&lt;210&gt; 3380

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3380

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&lt;211&gt; 1379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3381

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<212> PRT

<213> Homo sapiens

<400> 3382

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Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
				85					90					95	
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
				100				105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115				120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
			130			135				140					
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145					150					155				160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
				165					170					175	
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180				185						190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
			195				200					205			
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210		215		220
Gln Glu Leu Arg Ala	Arg Lys Ala Ala Arg	Pro Gly Gly Arg Glu Arg		
225	230	235	240	
Ala Arg Leu Ala Thr	Ala Gln Asp Lys Ala Arg	Ser Asn Lys Gly Leu		
	245	250	255	
Leu Ala Arg Ile Phe	Gly Ala Pro Pro Pro Ser	Glu Ser Met Glu Gly		
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<210> 3383  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 3383  
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 120  
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 180  
 ctgggagctg tcttgcccc gatctccac acaaacactc cagcatgaaa gagcgagact  
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 300  
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 309

<210> 3384  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 3384
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1 5 10 15
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20 25 30
Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
35 40 45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
50 55 60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
65 70 75 80
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
85 90

<210> 3385  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 3385

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 240  
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 300  
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 360  
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 420  
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 480  
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 540  
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 720

&lt;210&gt; 3386

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
			35				40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
				85					90					95	
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
			100					105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
		115					120					125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135					140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
				165					170					175	
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180

185

<210> 3387  
<211> 3299  
<212> DNA  
<213> Homo sapiens

<400> 3387  
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240  
cgagaagaag taagtgacgc cggctgcggc gggccgagga tcaccattaa caaggacacc  
300  
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420  
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480  
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1380

2565

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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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		20						25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35						40				45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
50						55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85					90					95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
	130					135					140				
Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
145						150									

<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 180  
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cggtcgac  
308

<210> 3390  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3390  
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Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro  
35 40 45  
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro  
50 55 60  
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu  
65 70 75 80  
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His  
85 90 95  
Val Glu Thr Pro Arg Ser  
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<210> 3391  
<211> 1295  
<212> DNA  
<213> Homo sapiens

<400> 3391  
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120  
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660  
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720

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 1080  
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 1200  
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 1260  
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 1295

&lt;210&gt; 3392

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3392

Ile	Val	Phe	Leu	Leu	Tyr	Leu	Glu	Thr	Cys	Leu	Glu	Val	Met	Asp	Asp
1				5					10					15	
Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser
			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
		35					40					45			
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
		50				55					60				
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65					70					75				80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100					105					110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
		115					120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
		130				135					140				
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145					150					155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165					170					175		
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
			180					185					190		
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
		195					200					205			
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

210	215	220
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr		
225	230	235
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro		240
	245	250
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		255
	260	265
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		270
	275	280
Ala Gly His Thr His Asp Gly Tyr Ser Glu Asp Pro Phe Gly Val		285
	290	295
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		300
305	310	315
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
	325	330
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala		335
	340	345
Phe His Cys		350
355		

&lt;210&gt; 3393

&lt;211&gt; 510

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3393

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480
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510

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&lt;210&gt; 3394

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3394

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Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

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 <213> Homo sapiens

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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro
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Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
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<211> 579
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 3402

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3402

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Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35					40					45			
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
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Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
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Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
				85					90					95	
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
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Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
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&lt;210&gt; 3403

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3403

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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln	35	40	45	
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly	50	55	60	
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Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly	85	90	95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys	100	105	110	
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp	115	120	125	
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser	130	135	140	
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr	145	150	155	160
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln	165	170	175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala	180	185	190	
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu	195	200	205	
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Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe	225	230	235	240
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu	245	250	255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr	260	265	270	
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<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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180  
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg  
240  
gcccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc  
300  
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<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

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			20					25					30		
Asp	Arg	Gly	Leu	Lys	Thr	Leu	Glu	Asn	Leu	Leu	Ala	Ser	Ile	Arg	Lys
		35					40				45				
Gly	Asn	Ala	Ile	Asp	Glu	Ala	Asp	Ile	Pro	Pro	Pro	Val	Ala	Ile	Gly
	50					55					60				
Lys	Gly	Pro	Ala	Ser	Thr	Pro	Thr	Tyr	Ser	Pro	Ala	Pro	Thr	Gln	Pro
65					70					75				80	
Ala	Pro	Arg	Ile	Ala	Ser	Ala	Pro	Glu	Pro	Arg	Val	Thr	Leu	Glu	Gly
			85						90				95		
Pro	Ser	Ala	Thr	Ala	Pro	Ala	Ser	Ser	Pro	Gly	Leu	Ala	Lys	Pro	Gln
		100						105					110		
Met	Pro	Pro	Gly	Pro	Cys	Ser	Pro	Pro	Ser	Gly	Pro	Val	Ala	Glu	Pro
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Pro	Ala	Arg	Leu	Gln	Ala										
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<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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120

gggacctttc ccggacaccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc  
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 420  
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<210> 3408  
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 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
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 35 40 45  
 Ser Ser Val Ala Arg Gln Val Ala Ala Pro Thr Gly Pro Ala Gly Thr  
 50 55 60  
 Phe Pro Gly Xaa Pro Gly Leu Leu Gly Lys Gln Val Ala Ala Pro Thr  
 65 70 75 80  
 Gly Pro Gly Gly Thr Phe Pro Gly His Leu Ala Ser Ser Ala Arg Gln  
 85 90 95  
 Val Ala Glu Leu Val Pro Arg Leu Ile Phe Leu Arg Gln Thr Cys Leu  
 100 105 110  
 Gln Arg Lys Leu Cys Ser Thr Gly Glu Thr Gly Lys Cys Thr Arg Tyr  
 115 120 125  
 Trp Leu Ile  
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<210> 3409  
 <211> 959  
 <212> DNA  
 <213> Homo sapiens

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 180  
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ctgcagtggg accgcaagct gagcgagctg tcagagcccg gggacggcga ggcctcatg  
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 360  
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<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
			35				40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50					55					60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
					70						75				80
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
		115					120					125			
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<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

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 660  
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 840  
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 958

&lt;210&gt; 3412

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3412

Met	Asp	Gln	Ser	Gly	Met	Glu	Ile	Pro	Val	Thr	Leu	Ile	Ile	Lys	Ala
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Pro	Asn	Gln	Lys	Tyr	Ser	Asp	Gln	Thr	Ile	Ser	Cys	Phe	Leu	Asn	Trp
			20					25					30		
Thr	Val	Gly	Lys	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys
		35					40					45			
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
	50					55					60				
Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
65					70					75				80	
Met	Val	His	Leu	Val	Cys	Thr	Ser	Arg	Thr	Pro	Pro	Ser	Ser	Pro	Lys
				85					90					95	
Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn

	100		105		110										
Ser	Ser	Ser	Asp	His	Ser	Gly	Ser	Thr	Thr	Pro	Ser	Ser	Gly	Gln	Glu
	115						120					125			
Thr	Leu	Ser	Leu	Ala	Val	Gly	Ser	Ser	Ser	Glu	Gly	Leu	Arg	Gln	Arg
	130					135					140				
Thr	Leu	Pro	Gln	Ala	Gln	Thr	Asp	Gln	Ala	Gln	Ser	His	Gln	Phe	Pro
145					150					155					160
Tyr	Val	Met	Gln	Gly	Asn	Val	Asp	Asn	Gln	Phe	Pro	Gly	Gln	Ala	Ala
			165						170					175	
Pro	Pro	Gly	Phe	Pro	Val	Tyr	Pro	Ala							
	180						185								

&lt;210&gt; 3413

&lt;211&gt; 3344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3413

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1080

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&lt;210&gt; 3414

&lt;211&gt; 723

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3414

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Gln	Glu	Leu	Leu	Asp	Lys	Ile	Lys	Glu	Glu	Pro	Asp	Asn	Ala	Gln	Glu
			20					25					30		
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
		35					40					45			
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50					55					60				
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65					70					75					80
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
				85					90					95	
Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
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Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
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		675		680		685
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<211> 259

<212> PRT

<213> Homo sapiens

<400> 3416

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Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
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Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
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Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
      35      40      45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
      50      55      60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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&lt;211&gt; 1851

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3423

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 1620  
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 1680  
 aagtccgaca tctccaggcc cccactgaac tccggggacc tctactgact gcttgctggg  
 1740  
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 1851

<210> 3424  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 3424  
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 Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu  
 35 40 45  
 Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His  
 50 55 60  
 Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu  
 65 70 75 80  
 Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro  
 85 90 95  
 Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro  
 100 105 110  
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 115 120 125  
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<210> 3425  
 <211> 1416  
 <212> DNA  
 <213> Homo sapiens

<400> 3425  
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 ccgcgtcaca gcacccacat ggcctctgga gtgggcgcgg ccttcgagga actgcctcac  
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gaatgcggct tctgctactg ccgccgccat gccgagggcg acaggcagaa gttcctcagt  
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 1416

&lt;210&gt; 3426

&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3426

Ser	Gly	Gly	Lys	Gly	Leu	Cys	Cys	Cys	Ala	Arg	Ala	Gly	Ala	Ala	Ala
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Ala	Pro	Gly	Pro	Ala	Ser	Arg	Arg	Gly	Ala	Val	Gln	Ala	Gly	Gly	Asp
			20					25					30		
Ser	Leu	Gly	Arg	Asp	Pro	Gly	Arg	Glu	Glu	Glu	Val	Arg	Pro	Arg	Gly
		35				40					45				
Arg	Lys	Ala	Ala	Ser	Pro	Gly	Ala	Pro	Arg	Pro	Trp	Pro	Arg	His	Ser
	50					55					60				
Thr	His	Met	Ala	Ser	Gly	Val	Gly	Ala	Ala	Phe	Glu	Glu	Leu	Pro	His

65					70					75					80
Asp	Gly	Thr	Cys	Asp	Glu	Cys	Glu	Pro	Asp	Glu	Ala	Pro	Gly	Ala	Glu
				85					90					95	
Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
			100					105					110		
Ala	His	Arg	Gln	Lys	Phe	Leu	Ser	His	His	Leu	Ala	Glu	Tyr	Val	His
		115					120					125			
Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
145					150					155					160
Ala	Gly	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu
				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
		180					185					190			
Glu	Asp	Ser	Glu	Glu	Glu	Met	Glu	Asp	Glu	Gln	Glu	Ser	Glu	Ala	Glu
	195					200					205				
Glu	Asp	Asn	Gln	Glu	Glu	Gly	Glu	Ser	Glu	Ala	Glu	Gly	Glu	Thr	Glu
	210					215					220				
Ala	Glu	Ser	Glu	Phe	Asp	Pro	Glu	Ile	Glu	Met	Glu	Ala	Glu	Arg	Val
225					230					235					240
Ala	Lys	Arg	Lys	Cys	Pro	Asp	His	Gly	Leu	Asp	Leu	Ser	Thr	Tyr	Cys
			245						250					255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
		260					265					270			
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
	275						280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
	290					295					300				
Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315					320
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
			325						330					335	
Ala	Asp	Glu	Glu	Gln	Lys	Ala	Leu	His	Leu	Val	Asp	Ile	Gln	Glu	Ala
		340					345					350			
Met	Ala	Thr	Ala	His	Val	Thr	Glu	Ile	Leu	Ala	Asp	Ile	Gln	Ser	His
	355						360					365			
Met	Asp	Arg	Leu	Met	Thr	Gln	Met	Ala	Gln	Ala	Lys	Glu	Gln	Leu	Asp
	370					375					380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
385					390					395					400
Pro	Ser	Gly	Ala	Ser	Glu	Glu	Glu	Asp	Thr						
				405					410						

&lt;210&gt; 3427

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3427

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ccggatttca atgtcatagt tcccattgtc aatgacatca tcggagaact tgacctgctg

120

gggctctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg  
 180  
 caggattttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg  
 240  
 cagcatggaa gagttcaaag ttcccatatt gctcatcttc tcacaatctt ctgtttccat  
 300  
 ctctcaaaa ttttgcagag aatacaatga tggccttggc ttgttttctc catccaccga  
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 420  
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 480  
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<210> 3428  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 3428  
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 Glu Asn Lys Pro Arg Pro Ser Leu Tyr Ser Leu Gln Asn Phe Glu Glu  
 20 25 30  
 Met Glu Thr Glu Asp Cys Glu Lys Met Ser Asn Met Gly Thr Leu Asn  
 35 40 45  
 Ser Ser Met Leu His Arg Ser Ala Glu Ser Leu Lys Ser Leu Ser Ser  
 50 55 60  
 Glu Leu Cys Pro Glu Lys Ile Leu Pro Glu Glu Lys Pro Val His Leu  
 65 70 75 80  
 Pro Val Leu Arg Arg Ser Lys Ser Gln Ser Arg Pro Gln Gln Val Lys  
 85 90 95  
 Phe Ser Asp Asp Val Ile Asp Asn Gly Asn Tyr Asp Ile Glu Ile Arg  
 100 105 110  
 Gln Pro Pro Met Ser Glu Arg Thr Arg Arg Arg Val Tyr Asn Phe Glu  
 115 120 125  
 Glu Arg Gly Ser  
 130

<210> 3429  
 <211> 634  
 <212> DNA  
 <213> Homo sapiens

<400> 3429  
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 120  
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 240  
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 300  
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 360  
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 420  
 ccccaccac cgggcacaca cccagcagct ccagggtctg tataagaaac cctgtggaag  
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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35				40						45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50					55					60				
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85				90						95	
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105					110		
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120  
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 180  
 agcgcgcga gccgtgtcgc caacagtacc aaatcgtcgt gcagcggcctt cgccccgcgc  
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttctgtgct caccaccaac  
 300  
 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc  
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 420  
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 1080  
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 1260  
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 1320  
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 1380  
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 1396

&lt;210&gt; 3432

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3432

Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu  
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 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu  
 20 25 30  
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly His Phe Leu  
 35 40 45  
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
145	150	155
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
	210	215
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		220
225	230	235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		240
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
	260	265
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		270
	275	280
Arg Gly Arg Gly Leu Gly Leu Ile		285
290	295	

&lt;210&gt; 3433

&lt;211&gt; 1257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3433

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 120  
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 180  
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 240  
 cgtctcctga gagagaagga ggccaagatc aggaaggcct tggacaggct tcgcaagaag  
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 480

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 540  
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 900  
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 960  
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 1080  
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<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

Ala	Thr	Arg	Gly	Ala	Gly	Pro	Gln	Gln	Arg	Leu	Leu	Pro	Ser	Ala	Gln
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Arg	Pro	Ser	Ser	Val	Pro	Pro	Ser	Pro	Ser	Pro	Arg	Pro	Leu	Pro	Gly
		20						25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
		35					40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
	50					55					60				
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
65					70					75					80
Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
				85					90					95	
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100						105					110	
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
		115					120					125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
		130					135					140			
Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
145					150					155					160
Cys	Gly	Glu	His	Val	Pro	Arg	Arg	Gly	Gly	Ser	His	Gly	Arg	Arg	Val

				165					170					175			
Gly	Tyr	Thr	Ser	Cys	Cys	Glu	Ser	Ser	Pro	Arg	Arg	Arg	Val	Ser	Cys		
			180					185					190				
Gly	Leu	Cys	Val	Gly	Tyr	Ser	Ser	Gln	Gly	Glu	Asp	Val	Ile	Tyr	Pro		
		195				200						205					
Ile	Leu	Pro	Ser	Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro		
	210					215					220						
Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu		
225					230					235					240		
Tyr	His	His	Pro	Val	Tyr	Thr	Ile	His	Pro	Ser	Thr	Pro	Ser	Pro	Leu		
				245				250						255			
Leu	Cys	Leu	Tyr	His	Pro	Pro	Val	Tyr	Thr	Ser	Thr	Thr	Thr	Pro	Ser		
		260					265						270				
Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser		
	275					280					285						
Pro	Ser	Ser	Ala	Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser		
	290				295					300							
Tyr	Thr	Thr	Thr	Pro	Ser	Thr											
305					310												

&lt;210&gt; 3435

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3435

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&lt;210&gt; 3436

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3436

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		20						25					30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
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	50					55					60				
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Asp	Asn	Phe	Met	Pro	Lys	Arg	Val	Val	Val	Tyr	Gly	Gly	Glu	Gly	Asp
				85					90					95	
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Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
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Asp	Ser	Glu	Ser	Ser	Lys	Pro	Ser	Phe	Met	Pro	Arg	Leu	Tyr	Ile	Asn
				245					250					255	
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Phe	Val	Trp	Lys	Gln	Leu	Ser	Ala								
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&lt;210&gt; 3437

&lt;211&gt; 2081

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3437

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840

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&lt;210&gt; 3438

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3438

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1140

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<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35				40					45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50				55				60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
				85					90					95	
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100				105						110		
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
			115				120					125			
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
			130			135					140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
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Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
			165						170					175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
			195				200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
			210			215					220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235				240	
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
			245						250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

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&lt;210&gt; 3441

&lt;211&gt; 2074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3441

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&lt;210&gt; 3442

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3442

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		20						25					30		
Ala	Glu	Leu	Leu	Met	Ser	Leu	His	Asp	Leu	Asp	Val	Gly	Glu	Ile	Cys
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Thr	Val	Asp	Pro	Cys	His	Lys	Phe	Thr	Trp	Cys	Leu	Asp	Ala	Cys	Ile
	50					55					60				
Arg	Glu	Arg	Phe	Val	Asp	Ser	Lys	Arg	Ala	Arg	Glu	Leu	Gln	Gly	Phe
65					70					75					80
Leu	Asp	Asp	Val	Lys	Lys	Gly	Gln	Glu	Gln	Val	Leu	Gly	Asp	Leu	Ser
				85					90					95	
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<211> 2070
<212> DNA
<213> Homo sapiens
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300
tacgatacct caggagaaga tgatatcaat atcaatgcc a cctgcttgaa ggctatatgt
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420
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480
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540
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600

```

cgagtagaga tcacaaatgt tcacagcagc cgggctcttg atgttcagtt cctggactct  
660  
ggcactgtga catctgtaaa agtgtcagag ctccaggaaa ttccacctcg gtttctacaa  
720  
gaaatgattg caataccacc tcaggccatt aagtgtctgt tagcagatct tccacaatct  
780  
attggcatgt ggacaccaga tgcagtgtct tggttaagag attctgtttt gaattgtctg  
840  
gactgtagca ttaaggttac aaaagtggat gaaaccagag ggatcgcaca tgtttattta  
900  
tttacccta agaacttccc tgaccctcat cgcagtatta atcgccagat tacaaatgca  
960  
gacttgtgga agcatcagaa ggatgtgttt ttgagtcca tatccagtgg agctgactct  
1020  
cccaacagca aaaatggcaa catgcccatt tcgggcaaca ctggagagaa tttcagaaag  
1080  
aacctcacag atgtcatcaa aaagtccatt gtggaccata cgagcgcttt ctccacagag  
1140  
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1200  
gtggcctgtc acccaggcta cttcgtcatc cagccttggc aggagataca taagttggaa  
1260  
gttctgatgg aagagatgat tctatattac agcgtgtctg aagagcgcca catagcagtg  
1320  
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1380  
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1440  
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1500  
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1680  
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1740  
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1800  
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1860  
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1920  
aaagaaaatt gtacttgaat tattactata atattagaat aaaaatgttt atcaatataa  
1980  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
2040  
aaaaaaaaaa aaaaaaaaaa aaaaaagggg  
2070

&lt;210&gt; 3444

&lt;211&gt; 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3444

```

Leu Ala Val Asn Ala Glu Glu Asp Ala Trp Leu Arg Ala Gln Val Ile
1      5      10      15
Ser Thr Glu Glu Asn Lys Ile Lys Val Cys Tyr Val Asp Tyr Gly Phe
20     25     30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
35     40     45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
50     55     60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
65     70     75     80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
85     90     95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
100    105    110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
115    120    125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
130    135    140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
145    150    155    160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
165    170    175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
180    185    190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
195    200    205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
210    215    220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
225    230    235    240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
245    250    255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
260    265    270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
275    280    285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
290    295    300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
305    310    315    320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
325    330    335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
340    345    350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
355    360    365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Leu Pro Pro
370    375    380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
385    390    395    400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

```

405 410 415  
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val  
 420 425 430  
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala  
 435 440 445  
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr  
 450 455 460  
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu  
 465 470 475 480  
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu  
 485 490 495  
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln  
 500 505 510  
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys  
 515 520 525  
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp  
 530 535 540  
 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr  
 545 550 555 560  
 Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser  
 565 570 575  
 Lys Val Asn

&lt;210&gt; 3445

&lt;211&gt; 2086

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3445

nnacgcgtgg cggcagaggg tatccaaggg cggacctggc gcgcaggcgc tgacccgacc  
 60  
 tggcagtgg ctggccgcgg ccttggctga gaggccttaa ccccgccggg cggcgcgcg  
 120  
 cctgcatgag agttggggccg cgggccccgg tggagcctac tcggggcgac tgcgatggac  
 180  
 gccttagaag gagagagctt tgcgctgtct ttctcctccg cctctgatgc agaatttgat  
 240  
 gctgtggttg gatatttaga ggacattatc atggatgacg agttccagtt attacagaga  
 300  
 aatttcatgg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac  
 360  
 acacctatct ttaatgaata ctttcttttg gtagaaaaat acattgaaga acagctgctg  
 420  
 cagcggattc ctgagttcaa catggcagcc ttcaccacaa cattacacca tctgttccgt  
 480  
 ttgaggcacc ataaggatga agtggctggg gacatattcg acatgctgct caccttcaca  
 540  
 gattttctgg cttttaaaga aatgtttttg gactacagag cagaaaaaga aggccgagga  
 600  
 ctggacttaa gcagtggctt agtgggtgact tcattgtgca aatcatcttc tctgccagct  
 660  
 tcccagaaca atctgcggca ctaggtccta cctccagcca atgaatggga tcattctgga  
 720

tgtcaccagc ccaataggct cagctcatga tgacagaaca catcttggaa agactgactc  
780  
tgttatgtaa ctcttcattt atgttaagta ttaataggctc aaaacccaaa tgacctaac  
840  
ctctggacc tatttatcct gaaacacctt cttgtattca ttaaccatag tactcctccc  
900  
cacctcaagt agacacctct ctcaggagct tctgagtcag acgcctctgg agcgagccct  
960  
atgtcaggca ctccacctgg ggggcccttc cccagcatac ctgctggtgt gtaagtgtgg  
1020  
actaaccgcg cgccaccacc ctctgttcca gcaggctctg catgaatctt tgtgcacttg  
1080  
cacctctttt tcacatgggc cacagtttca gtacttcagc ctcagtgggg ttctgtatgt  
1140  
ttatctaggg tgttactcaa gccagtttg agattttgga gtctcctgtg atcacatctt  
1200  
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1260  
gtactccta gtcttaacat ttgcagtcct tgtgtcactg tcttctgggc ctgatgtagt  
1320  
cccactgttt ctagaagtct cttttaagca ttatttttga aaaaaaaaaat atttttatag  
1380  
atgaatactc aggctaacct agtggatgtg atcttggaaac ttccatgatt atccacttaa  
1440  
agatcaaagt atttatatgt gtgtgctttt taggtgtttg ttagtactgt gaaggcaaaa  
1500  
atgctttcta cattgacatt cattcctatt ttactgggca cctatgaatg tatgctgtgt  
1560  
gctagaaata gactaaaaca tattcctata gcatgttagt gtgtttgcat gtttgctgaa  
1620  
aatcctttgt gtataaacca gtttgtaagg ttctctgggt taggtaggga ctctgcagtt  
1680  
tcttctgtc aaaatctctc ctaccaagat ggtgttccac tgtccagccc agcatgagta  
1740  
gcaggtagag cacagcttta ctggctgttt gtatgctttg gtttagtgca atgtgtggta  
1800  
gattacttat cagaaaacat atatgtcatc tctagaacga agaaaaagca tagtagttca  
1860  
attcccagtg tgtccctttg attttttttt tttaatagta aaaataagaa tctgtactga  
1920  
cttttcactt ggccattctg gttttaaagg acaagctaca agctctgtgt ttctgtactg  
1980  
atgtgtcact tattaaatac ttttgtacca tgagtaaaac ttcagggtgt tcgcaagaac  
2040  
caccattctc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

Met Asp Ala Leu Glu Gly Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

```

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Ser Asp Ala Glu Phe Asp Ala Val Val Gly Tyr Leu Glu Asp Ile Ile
      20             25             30
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr
      35             40             45
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro
      50             55             60
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln
      65             70             75             80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr
      85             90             95
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly
      100            105            110
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys
      115            120            125
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp
      130            135            140
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu
      145            150            155            160
Pro Ala Ser Gln Asn Asn Leu Arg His
      165

```

&lt;210&gt; 3447

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3447

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acgcgtgaag ggtttgcggg gaagatggag tatcccgcg cggccacggg gcaggccgcg
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gacggcgagg cggccggggc ttacagcagc tcggagttgc tggagggcca ggagccggac
120
ggggtgcgct ttgaccgcga gagggcgcg cgctgtggg aagccgtgtc cgggtgcccag
180
ccggtgggta gagaggaagt ggagcacatg atccagaaga accaatgtct cttcaccaac
240
accagtgtg aggtttgctg cgccttgctt atttctgagt cccagaagct ggcacattac
300
cagagcaaaa aacatgccaa caaagtgaag agatacctag caatccatgg aatggagaca
360
ttaaaggggg aaacgaagaa gctagactca gatcagaaga gcagcagaag caaagacaag
420
aaccagtgtc gcccacatctg taacatgacc ttttcctccc ctgtcgtggc ccagtgcac
480
tacctgggga agaccacgc aaagaactta aagctgaagc agcagtccac taaggtggaa
540
gccttgacc agaatagaga gatgatagac ccagacaagt tctgcagcct ctgccatgca
600
actttcaacg accctgtcat ggctcaacaa cattatgtgg gcaagaaaca cagaaaacag
660
gagaccaagc tcaaactaat ggcacgctat gggcggtctg cggaccctgc tgtcactgac
720
tttccagctg gaaagggcta cccctgcaaa acatgtaaga tagtgctgaa ctccatagaa
780

```

cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcaccaaaa aacagtggca  
 840  
 tcatccctgg gccagattcc aatgcaaagg caacccattc agaaagactc aaccaccttg  
 900  
 gaagactaga ggtgattctg cccagcatcc catatt  
 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

Thr	Arg	Glu	Gly	Phe	Ala	Gly	Lys	Met	Glu	Tyr	Pro	Ala	Pro	Ala	Thr
1				5					10					15	
Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70					75					80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
				85					90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145					150					155					160
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
				165					170					175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180						185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
		195					200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225				230						235					240
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245						250					255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260					265						270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
	275						280					285			
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
	290					295						300			

<210> 3449

<211> 877

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3449

```

ntgatcttca gcaaccatca ccaccggcta cagctgaagg cagctccggc ctctccaat
60
ccccccggcg ccccggtctt gccgctgcac aattcctccg tgactgcaa ctcccagtcc
120
ccggcccttc tggccggcac caaccccggt gctgtcgtcg cggatggagg cagttgcccc
180
gcacactacc cgggtgcacga gtgctgtctt aaggggggatg tgaggagact ctctctctc
240
atccgcacgc acaatatcgg gcagaaagat aatcacggaa atactccttt acaccttgct
300
gtgatgttag gaaataaaga atgtgccccat ttacttttgg ctcaaatgc tccagtcaag
360
gtgaaaaatg ctccgggatg gagccctctg gcggaagcca tcagctatgg agataggcag
420
atgattacag ctcttttgag gaagcttaag cagcaatcca gggaaagtgt tgaagaaaaa
480
cgacctgat tattaagaag cctgaaagag ctaggtgact tttatctaga acttcactgg
540
gattttcaaa gctgggtgcc ttacttttcc cgaattctgc cttccgatgc atgtaaaata
600
tacaacaag gtatcaatat caggcttgac acaactctca tagactttac tgacatgaag
660
tgccaacgag gggatctaag cttcattttc aatgggggatg cggcgccctc tgaatctttt
720
gtagtattag acaatgaaca aaaagtttat cagcgaatac atcatgaggc tcacatccca
780
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
840
tgcaacttta tcaacaaaat caatttcttt cacgcgt
877

```

&lt;210&gt; 3450

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3450

```

Xaa Ile Phe Ser Asn His His His Arg Leu Gln Leu Lys Ala Ala Pro
 1           5           10           15
Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
          20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
          35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
          50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
          85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

```

```

      100      105      110
Leu Ala His Asn Ala Pro Val Lys Val Lys Asn Ala Gln Gly Trp Ser
      115      120      125
Pro Leu Ala Glu Ala Ile Ser Tyr Gly Asp Arg Gln Met Ile Thr Ala
      130      135      140
Leu Leu Arg Lys Leu Lys Gln Gln Ser Arg Glu Ser Val Glu Glu Lys
      145      150      155      160
Arg Pro Arg Leu Leu Lys Ala Leu Lys Glu Leu Gly Asp Phe Tyr Leu
      165      170      175
Glu Leu His Trp Asp Phe Gln Ser Trp Val Pro Leu Leu Ser Arg Ile
      180      185      190
Leu Pro Ser Asp Ala Cys Lys Ile Tyr Lys Gln Gly Ile Asn Ile Arg
      195      200      205
Leu Asp Thr Thr Leu Ile Asp Phe Thr Asp Met Lys Cys Gln Arg Gly
      210      215      220
Asp Leu Ser Phe Ile Phe Asn Gly Asp Ala Ala Pro Ser Glu Ser Phe
      225      230      235      240
Val Val Leu Asp Asn Glu Gln Lys Val Tyr Gln Arg Ile His His Glu
      245      250      255
Ala His Ile Pro Gly Ile Arg Asp Gly Asn Arg Arg Arg Gly Gly Tyr
      260      265      270
Phe Asn Glu Gln
      275

```

```

<210> 3451
<211> 595
<212> DNA
<213> Homo sapiens

```

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<400> 3451
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120
gaaatattca gtaagtagtg ccctgccatt gcagggttgg atgtccttct gccagcaaaa
180
cccagcatga acctctggct tgtggagatg tcttccagct ggaaacctga gtgagcgaag
240
ttgaactgtg agggcggcac aactgagaga agattctgcc tccgaacct ctgaatgaga
300
gtctgaagga tctgatcttg ggttgcttta cttagtcctt cgtggtattg gtgtgtgtca
360
atgctggagt ccctcagctc cttagctgaa aagagctgaa ggggccttgg aacctggggg
420
agctgcttac tttgcaagg tttgccagc tgetgctgcg tagctggatg ggactgtctc
480
tcattaactt cctctctggt gctattttct gttgtgttgg tagctatgag cgctcccatc
540
cccccttccct cttttgcagg caggggaacc gcttccattt caactttggg gagag
595

```

```

<210> 3452
<211> 192
<212> PRT

```

&lt;213&gt; Homo sapiens

&lt;400&gt; 3452

```

Met Glu Ala Val Pro Leu Pro Ala Lys Glu Glu Arg Gly Met Gly Ala
 1           5           10           15
Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
 20           25           30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
 35           40           45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
 50           55           60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
 65           70           75           80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
 85           90           95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
100           105           110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
115           120           125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
130           135           140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145           150           155           160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
165           170           175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
180           185           190

```

&lt;210&gt; 3453

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3453

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nnacgcgtga aggggtcccg cgcgggggct ggcgggctga ggggagaaaa gatggcggcg
60
gcggcggcag ctggtgcggc ctccgggctg ccgggtccag tggcacaagg attaaaggaa
120
gcgttagtg atacgctcac cgggataccta tccccagtac aggaggtgcg ggcggctgct
180
gaagaacaga ttaaggtgct ggaggtgacg gaggaatttg gtgttcactt ggcagaactg
240
actgtagatc cccagggggc actggcaatc cgtcagctgg catcagtcac cttgaaacaa
300
tatgtggaga ctactgggtg tgcccaatca gagaaattta ggctcctga aactacagaa
360
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420
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&lt;210&gt; 3454

&lt;211&gt; 159

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3454

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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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&lt;210&gt; 3456

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3456

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			20					25					30		
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
				85					90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

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<212> DNA  
<213> Homo sapiens

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<210> 3458  
<211> 61  
<212> PRT  
<213> Homo sapiens

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Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys  
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<210> 3459  
<211> 592  
<212> DNA  
<213> Homo sapiens

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 480  
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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

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			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
		35					40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
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Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65					70				75					80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90					95		
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
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Leu	Lys	Leu													
			115												

<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
		20						25				30			
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
		35					40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55					60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70					75				80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85					90					95	
Val	Ile	Thr	Val	His											
				100											

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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&lt;210&gt; 3464

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3464

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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala
			20					25				30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His

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Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg
  65              70              75              80
Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met
      85              90              95
Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly
  100              105              110
Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val
  115              120              125
Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu
  130              135              140
Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met
  145              150              155              160
Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu
      165              170              175
Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu
  180              185              190
Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala
  195              200              205
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Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu
  225              230              235              240
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Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala
  275              280              285
Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val
  290              295              300
Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys
  305              310              315              320
Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His
      325              330              335
Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu
  340              345              350
Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu
  355              360              365
Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln
  370              375              380
Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu
  385              390              395              400
Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg
      405              410              415
Leu Glu Glu Lys Thr Asn Gln Met Ala Ala Thr Ile Lys Gln Leu Glu
  420              425              430
Gln Arg

```

&lt;210&gt; 3465

&lt;211&gt; 2904

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3465

acgcgtccgc cggagcgggc catggacgcg ctcaagtcgg cggggcgggc gctgatccgg  
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agccccagct tggccaagca gagctggggg ggcgggtggcc ggcaccgcaa gctgcctgag  
120  
aactggacag acacgcggga gacgctgctg gaggggatgc tgttcagcct caagtacctg  
180  
ggcatgacgc tagtggagca gccaagggt gaggagctgt cggccgccgc catcaagagg  
240  
atcgtggcta cagctaaggc cagtgggaag aagctgcaga aggtgactct gaaggtgtcg  
300  
ccacggggaa ttatcctgac agacaacctc accaaccagc tcattgagaa cgtgtccata  
360  
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420  
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gcacaggctg ttaccctcac cgtagcccag gccttcaaag tcgcctttga gttttggcag  
540  
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720  
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1740  
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1920  
cagatgagga aactgaggcc tcaagcgtgg aggggtagag tgaagagtag aaccaggctc  
1980  
tgatgccaaa gctgctttct tctctgctc ctctcacgc aactcacacc tccttttctt  
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2100  
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2220  
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2760  
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2880  
aaaaaaaaa aaaaaaaaaa aaaa  
2904

&lt;210&gt; 3466

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3466

```

Thr Arg Pro Pro Glu Arg Ala Met Asp Ala Leu Lys Ser Ala Gly Arg
 1           5           10           15
Ala Leu Ile Arg Ser Pro Ser Leu Ala Lys Gln Ser Trp Gly Gly Gly
      20           25           30
Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
      35           40           45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
      50           55           60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
      65           70           75           80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
      85           90           95
Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
      100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
      115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
      130          135          140
Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
      145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
      165          170          175
Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
      180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
      195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
      210          215          220
Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
      225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
      245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
      260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
      275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
      290          295          300
Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
      305          310          315

```

&lt;210&gt; 3467

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3467

```

acgcgtgaag ggcacggagg tattcattgt attattcttt caacctttat gaatgtatca
60
acatttgcaa aataaaaaag ttgtggagga ggaagaaaaa caaaaaccag gatgcactga
120
ggctctgaggt gaaggtccta ggagcatcag ttctctgttg ggatcaaggt tgctgggaca
180

```

gagcttgatc cctgtcaact gctaaaacaa tccaggacaa tccaatagta gagctgaatt  
 240  
 ttgattacct tggctcctgag cttcacagcc ctttggcaga ggaaatcctg tgacactgag  
 300  
 gtgtaaccac aagactggcc caaactgacc ctattctggt ggtaacagga ggtatagcag  
 360  
 agccaaaact gaaagtcctg taaccctggac atgcacaaag gaggaaaatc ataactcgga  
 420  
 accaacgttt cctccctgtg gagccaagaa gacagggaca tgaccggagc ttgaggggag  
 480  
 gaacgctttc agaaggggaag ggtccattat cctggaagat ctggtgctga aacctgccat  
 540  
 tccacacctt accataaatg gccaaagttta aagccctcct attgaaacct gcccgccagc  
 600  
 acttctgtgt gccaacctgt cctccctaac ccgtcgac  
 638

&lt;210&gt; 3468

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3468

Met	Ser	Leu	Ser	Ser	Trp	Leu	His	Arg	Glu	Glu	Thr	Leu	Val	Pro	Ser
1				5					10					15	
Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35				40						45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
	50					55				60					
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
65					70				75					80	
Ile	Val	Leu	Asp	Cys	Phe	Ser	Ser								
				85											

&lt;210&gt; 3469

&lt;211&gt; 1710

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3469

gccgcggctc cgggggaacgg ccgcgcacgc gcgccccggc tgcttctgct ctttctggtt  
 60  
 ccgctgctgt gggccccggc tgcgggtccgg gccggcccag atgaagacct tagccaccgg  
 120  
 aacaaagaac cgccggcgcc ggcccagcag ctgcagccgc agcctgtggc tgtgcagggc  
 180  
 cccgagccgg cccgggtcga gaaaatattt acaccagcag ctccagttca taccaataaa  
 240  
 gaagatcctg ctacccaaac taatttgga tttatccatg catttgctgc tgccatatca  
 300  
 gttattattg tatctgaatt gggtgataag acatttttta tagcagccat catggcaatg  
 360

cgtataacc gcctgaccgt gctggctggt gcaatgcttg ccttgggact aatgacatgc  
420  
ttgtcagttt tgtttggcta tgccaccaca gtcacccca gggctctatac atactatgtt  
480  
tcaactgtat tatttgccat ttttggcatt agaatgcttc ggggaaggctt aaagatgagc  
540  
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600  
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660  
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720  
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1620  
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1680  
ggatgacca gtgaaaaaaaa aaaaaaaaaa  
1710

&lt;210&gt; 3470

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3470

Ala Ala Ala Pro Gly Asn Gly Arg Ala Ser Ala Pro Arg Leu Leu Leu

```

1           5           10           15
Leu Phe Leu Val Pro Leu Leu Trp Ala Pro Ala Ala Val Arg Ala Gly
20           25           30
Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala
35           40           45
Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
50           55           60
Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys
65           70           75           80
Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val
85           90           95
Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe
100          105          110
Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu
115          120          125
Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu
130          135          140
Phe Gly Tyr Ala Thr Thr Val Ile Pro Arg Val Tyr Thr Tyr Tyr Val
145          150          155          160
Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly
165          170          175
Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln
180          185          190
Ala Glu Leu Lys Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu
195          200          205
Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln
210          215          220
Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr
225          230          235          240
Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile
245          250          255
Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr
260          265          270
Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met
275          280          285
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile
290          295          300
Val Phe Leu Ala Phe Ala Phe Ser Ala Leu Phe Ile Ser Pro Asp Ser
305          310          315          320
Gly Phe

```

&lt;210&gt; 3471

&lt;211&gt; 2335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3471

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120

gagaagtgcc gtatcgacac ggagatcctg ccctccctgt tcatgcgctg caccaccgac  
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1800

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 2160  
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 2220  
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 2335

<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

Gly	Arg	Val	Ala	Leu	Ala	Asp	Ile	Ala	Phe	Thr	Gly	Gly	Gly	Asn	Ile
1				5					10					15	
Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln	Phe	Tyr
			20					25					30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
		35					40					45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
65					70					75				80	
Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
				85					90					95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100					105					110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
	130					135					140				
Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
145					150					155				160	
Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
				165					170					175	
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
		180						185					190		
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
		195					200					205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
	210					215					220				
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly

225		230		235		240									
Lys	Leu	Ser	Val	Leu	Arg	Leu	Ser	Pro	Ser	Met	Gly	His	Pro	Leu	Glu
				245					250					255	
Val	Gly	Leu	Ala	Leu	Arg	His	Leu	Leu	Phe	Leu	Leu	Glu	Tyr	Cys	Met
			260						265					270	
Val	Thr	Gly	Tyr	Asp	Trp	Trp	Asp	Ile	Leu	Leu	His	Val	Gln	Pro	Ser
		275					280						285		
Met	Val	Gln	Ser	Leu	Val	Glu	Lys	Leu	His	Glu	Glu	Tyr	Thr	Arg	Gln
	290						295					300			
Thr	Ala	Ala	Leu	Gln	Gln	Val	Leu	Ser	Thr	Arg	Ile	Leu	Ala	Met	Lys
305						310					315				320
Ala	Ser	Leu	Cys	Lys	Leu	Ser	Pro	Cys	Thr	Val	Thr	Arg	Val	Cys	Asp
				325					330					335	
Tyr	His	Thr	Lys	Leu	Phe	Leu	Ile	Ala	Ile	Ser	Ser	Thr	Leu	Lys	Ser
			340					345						350	
Leu	Leu	Arg	Pro	His	Phe	Leu	Asn	Thr	Pro	Asp	Lys	Ser	Pro	Gly	Asp
		355					360						365		
Arg	Leu	Thr	Glu	Ile	Cys	Thr	Lys	Ile	Thr	Asp	Val	Asp	Ile	Asp	Lys
	370					375					380				
Val	Met	Ile	Asn	Leu	Lys	Thr	Glu	Glu	Phe	Val	Leu	Asp	Met	Asn	Thr
385					390					395					400
Leu	Gln	Ala	Leu	Gln	Gln	Leu	Leu	Gln	Trp	Val	Gly	Asp	Phe	Val	Leu
				405					410					415	
Tyr	Leu	Leu	Ala	Ser	Leu	Pro	Asn	Gln	Gly	Ser	Leu	Leu	Arg	Pro	Gly
			420					425					430		
His	Ser	Phe	Leu	Arg	Asp	Gly	Thr	Ser	Leu	Gly	Met	Leu	Arg	Glu	Leu
		435				440						445			
Met	Val	Val	Ile	Arg	Ile	Trp	Gly	Leu	Leu	Lys	Pro	Ser	Cys	Leu	Pro
	450					455					460				
Val	Tyr	Thr	Ala	Thr	Ser	Asp	Thr	Gln	Asp	Ser	Met	Ser	Leu	Leu	Phe
465					470					475					480
Arg	Leu	Leu	Thr	Lys	Leu	Trp	Ile	Cys	Cys	Arg	Asp	Glu	Gly	Pro	Ala
				485					490					495	
Ser	Glu	Pro	Asp	Glu	Ala	Leu	Val	Asp	Glu	Cys	Cys	Leu	Leu	Pro	Ser
		500						505					510		
Gln	Leu	Leu	Ile	Pro	Ser	Leu	Asp	Trp	Leu	Pro	Ala	Ser	Asp	Gly	Leu
	515						520						525		
Val	Ser	Arg	Leu	Gln	Pro	Lys	Gln	Pro	Leu	Arg	Leu	Gln	Phe	Gly	Arg
	530					535					540				
Ala	Pro	Thr	Leu	Pro	Gly	Ser	Ala	Ala	Thr	Leu	Gln	Leu	Asp	Gly	Leu
545					550					555					560
Ala	Arg	Ala	Pro	Gly	Gln	Pro	Lys	Ile	Asp	His	Leu	Arg	Arg	Leu	His
				565					570					575	
Leu	Gly	Ala	Cys	Pro	Thr	Glu	Glu	Cys	Lys	Ala	Cys	Thr	Arg	Cys	Gly
		580					585						590		
Cys	Val	Thr	Met	Leu	Lys	Ser	Pro	Asn	Arg	Thr	Thr	Ala	Val	Lys	Gln
	595						600					605			
Trp	Glu	Gln	Arg	Trp	Ile	Lys	Asn	Cys	Leu	Cys	Gly	Gly	Leu	Trp	Trp
	610					615					620				
Arg	Val	Pro	Leu	Ser	Tyr	Pro									
625					630										

&lt;210&gt; 3473

&lt;211&gt; 1660

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3473

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120  
gcgccatgcc cgggccggac tgagtgcgcg cgggcgagaa tggcgtacat ccagttggaa  
180  
ccattaaacg agggttttct ttctagaatc tctggtctgc tgctgtgcag atggacctgc  
240  
cggcactgct gtcagaagtg ctacgagtc agctgttgcc agtcaagtga ggatgaagtt  
300  
gaaattctgg gacctttccc tgctcagacc cctccctggc tgatggccag ccggagcagt  
360  
gacaaggatg gtgactctgt ccacacggcc agcgaagtcc cgctgacccc acggaccaat  
420  
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480  
aggatttcga gtcttgagtc aagacgtccc agctctccac tcatcgatat taaacccatc  
540  
gagtttggcg ttctcagcgc caagaaggag cccatccaac cttcggtgct cagacggacc  
600  
tataaccccg acgactatct caggaagttc gaaccccacc tgtactccct cgactccaac  
660  
agcgacgatg tggactctct gacagacgag gagatcctgt ccaagtacca gctgggcatg  
720  
ctgcacttca gcaactcagta cgacctgctg cacaaccacc tcaccgtgcg cgtgatcgag  
780  
gccagggacc tgccacctcc catctcccac gatggctcgc gccaggacat ggcgcactcc  
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1140  
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1200  
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1260  
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1320  
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1380  
tttacagttt tcggccacaa catgaagagc agcaatgact tcatcgggag gatcgtcatt  
1440  
ggccagtact cttcaggccc ctctgagacc aaccactgga ggcgcatgct caacacgcac  
1500

cgcacagccg tggagcagtg gcatagcctg aggtcccgag ctgagtgtga ccgcgtgtct  
 1560  
 cctgcctccc tggaggtgac ctgagggctg caggggaaggc agctttcatt tgtttaaaaa  
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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln	20	25	30	
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu	35	40	45	
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser	50	55	60	
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val	65	70	75	80
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser	85	90	95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu	100	105	110	
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu	115	120	125	
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu	130	135	140	
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His	145	150	155	160
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp	165	170	175	
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr	180	185	190	
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala	195	200	205	
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met	210	215	220	
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys	225	230	235	240
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe	245	250	255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg	260	265	270	
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys	275	280	285	
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys	290	295	300	
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val	305	310	315	320
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly				

```

          325          330          335
Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
          340          345          350
Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
          355          360          365
Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
          370          375          380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
          385          390          395          400
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
          405          410          415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
          420          425          430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
          435          440          445
Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
          450          455          460
Arg Val Ser Pro Ala Ser Leu Glu Val Thr
          465          470

```

&lt;210&gt; 3475

&lt;211&gt; 514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3475

```

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cagcccttct tctactcact acggccgctc tgcgtccacc ccaaggccgt gaccgcgatg
120
gaggtgctca acacgctggt gcagctggcg gccgacctgg ccattctttgc cctttggggg
180
ctcaagcccc tgggtctacct gctggccagc tccttctctg gcctgggcct gcaccccatc
240
tcggggccact tcgtggccga gactacatg ttcttcaagg gccacgagac ctactcctac
300
tatgggcctc tcaactggat caccttcaat gtgggctacc acgtggagca ccacgacttc
360
cccagcatcc cgggctacaa cctgccgctg gtgcggaaga tcgcgcccga gtactacgac
420
cacctgccgc agcaccactc ctgggtgaag gtgctctggg attttgtgtt tgaggactcc
480
ctgggggcct atgccagggt gaagcgggtg taca
514

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&lt;210&gt; 3476

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3476

```

Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
1          5          10          15
Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val

```

```

                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
                35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
                50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
                85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
                100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
                115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
                130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
                165                170

```

<210> 3477  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 3477  
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 60  
 ttgacctcct gcatcgaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa  
 120  
 gtggcctttg actttgtctgc ccgagagatg gctccaaata tggcagagtg ggaccagaag  
 180  
 gtaggcgttt ttcttgtgct tagacgttct aacaacagat gtctcaggca gacctttatc  
 240  
 tttgtctccc gataatgtaa ttgttaaagt tctcctccac ttaccaactc ttactgcaag  
 300  
 tgagaatacc ggtagtggat gatttttctc agaaggcac ctgatcatct tgtaca  
 356

<210> 3478  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3478
Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
  1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
                20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
                35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
                50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

65          70          75          80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
          85          90          95
Ala Pro Val Ala Gly Leu Asp Glu Asp Pro Glu Thr Ala Gly Gln Ala
          100          105          110
Ala Glu Ala Arg
          115

```

<210> 3479  
 <211> 797  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3479
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120
gagtatctca tgtacctcaa caccgcggct gggagaacct gcaatgacta catgcagtac
180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaatccg
240
aagattttcc gggatctttc aaagcccatg ggggctcaga ccaaggaaag gaagctgaaa
300
tttatccaga ggttttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
360
tactacaccc actactcttc ggccatcate gtggcctcct acctgggtccg gatgccaccc
420
ttcaccacag ccttctgcgc tctgcagggt agctgctgcc actctctgta cacacacaca
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cacacacaca cacacacata cgctgtatc acaagactaa gacctgtgct tgaacaaaga
540
caggatgcct ctgctaaaaa cttagtcatt agccagtgat tcccagttga cattgggtcc
600
aggattctgg ctcaccagcc aaggcaggct gttcttcttc agttacacct gcacatctgc
660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
720
taacataaat aagatttagt ggaaaaagaa aaagcaggaa acttggagac tagaaaggca
780
ggcgggtcaag gattaga
797

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<210> 3480  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

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<400> 3480
Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
  1          5          10          15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
          20          25          30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

```

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<210> 3481
<211> 1794
<212> DNA
<213> Homo sapiens
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<400> 3481
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aaaagcccag cacttcccag agccagggac tgacacaaca gaaagtctgc aagcaatgcc
120
atgaggtcct gaccagaggg tcttctgcc aatgcctcaa gtggtcacca cctcagctct
180
gcagaccctg cggtgctggg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
ttcaccctct tcaagaagga gtacggctgt aagaattgtg gcaggngctt ctgttcaggg
300
tgcctaagct tcagtgcagc agtgcctcgg actgggaaca cccaacagaa agtctgcaag
360
caatgccatg aggtcctgac cagaggggtct tctgccaatg cctccaagtg gtcaccacct
420
cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
agccagggac tgacacgaca agaccagatg attgctgagc gcctagcacg actccgccag
540
gagaacaagc ccaagttagt cccctcacag gcagagatag aggcacggct ggctgccta
600
aaggatgaac gtcaggggtt catcccttcc acccaggaaa tggaggcacg acttgcagcg
660
ttgcagggca gagttctacc ttctcaaacc cccagccccg gcacatcaca caccggacac
720
caggacccaa gcccagcaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
cgatgaaagc tggaaaggag gagggcccagc tgctctctc cagaatgatc tcaaccaggg
840

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 960  
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 1020  
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 1200  
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 1320  
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 1380  
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 1560  
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 1620  
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 1680  
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 1740  
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 1794

&lt;210&gt; 3482

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
	50					55				60					
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65				70						75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85						90					95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

<400> 3484															
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Gln	Pro	His	Thr	Gln	Arg	Arg	Lys	Glu	Ile	Leu	Ala	Lys	Tyr	Pro	Ala
			20					25					30		
Ile	Lys	Ala	Leu	Met	Arg	Pro	Asp	Pro	Arg	Leu	Lys	Trp	Ala	Gly	Leu
		35					40					45			
Val	Leu	Val	Leu	Val	Gln	Met	Leu	Ala	Cys	Trp	Leu	Val	Arg	Gly	Leu
	50					55					60				
Ala	Trp	Arg	Trp	Leu	Leu	Phe	Trp	Ala	Tyr	Ala	Phe	Gly	Gly	Cys	Val
65					70					75					80
Asn	His	Ser	Leu	Thr	Leu	Ala	Ile	His	Asp	Ile	Ser	His	Asn	Ala	Ala
				85					90					95	
Phe	Gly	Thr	Gly	Arg	Ala	Ala	Arg	Asn	Arg	Trp	Leu	Ala	Val	Phe	Ala

	100		105		110
Asn	Leu	Pro	Val	Gly	Val
	115		120		125
Val	Asp	His	His	Arg	Tyr
	130		135		140
Pro	Thr	Arg			
145					

<210> 3485  
 <211> 812  
 <212> DNA  
 <213> Homo sapiens

<400> 3485  
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 120  
 gtctaaaaaa tcttattggt ctcagggttag cagttagttg agcagagtcc attggtgaag  
 180  
 caatctagtt attggcaaat tetaacacat ggtaagggtgt gggggaaagg atttaaaata  
 240  
 acagaaaaat gtaagtacaa acatacataa cagcaaaaata aaactcactt taacaaaaat  
 300  
 ttatttaaaa tgttaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc  
 360  
 cctcatccgg ttatttttatg tctttttggg aggaagggag atgaggggtt ttgtttttta  
 420  
 acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt  
 480  
 ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt  
 540  
 atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac  
 600  
 attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact  
 660  
 ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcatcacta  
 720  
 tcctaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa  
 780  
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<210> 3486  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 3486  
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<400> 3488
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Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

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<210> 3489  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 3489  
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 120  
 gcccgagggtg ccccatgagg cctgggtggtt ggagggcagag ggtatccctt gcccaaattc  
 180  
 gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tgggtcacac  
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 288

<210> 3490  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 3490  
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 Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile  
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 35 40 45  
 Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser  
 50 55 60  
 Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr  
 65 70 75 80  
 Leu Glu Ser Pro Lys Thr Thr Asp His Glu  
 85 90

<210> 3491  
 <211> 568  
 <212> DNA  
 <213> Homo sapiens

<400> 3491  
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 120  
 aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc  
 180

tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgctgat  
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 480  
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<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

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			20					25					30		
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
		35					40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55					60				
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70					75				80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85					90					95		
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
			100					105					110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
		115					120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150					155				160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
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<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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120  
aatcactctg aaagatcaga caatagatca gaagcttctg agcggttctga ccatgaggac  
180  
aatgaccctt cagatgtaga tcagcacagt ggatcagaag cccctaataga tgatgaagac  
240  
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480  
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540  
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600  
gatgaagaga aaatgcaaaa ttctgatgat gaaaggccac aggccccaga tgaagaacac  
660  
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720  
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780  
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 1920  
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 1980  
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 2160  
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 2244

&lt;210&gt; 3494

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3494

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			20					25				30			
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35				40					45				
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
	50					55					60				
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65					70					75				80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	His	Ser	Glu	Ala	Glu	Gly
			85					90						95	
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
		100						105				110			
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
	115					120						125			
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
	130					135						140			
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
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Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
			165					170						175	
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
		180					185						190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
	195					200						205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210	215	220
Asp Glu Glu Glu Gln	Asp His Lys Ser Glu	Ser Ala Arg Gly Ser Asp
225	230	235
Ser Glu Asp Glu Val	Leu Arg Met Lys Arg	Lys Asn Ala Ile Ala Ser
245	250	255
Asp Ser Glu Ala Asp	Ser Asp Thr Glu Val	Pro Lys Asp Asn Ser Gly
260	265	270
Thr Met Asp Leu Phe	Gly Gly Ala Asp Asp	Ile Ser Ser Gly Ser Asp
275	280	285
Gly Glu Asp Lys Pro	Pro Thr Pro Gly Gln	Pro Val Asp Glu Asn Gly
290	295	300
Leu Pro Gln Asp Gln	Gln Glu Glu Glu Pro	Ile Pro Glu Thr Arg Ile
305	310	315
Glu Val Glu Ile Pro	Lys Val Asn Thr Asp	Leu Gly Asn Asp Leu Tyr
325	330	335
Phe Val Lys Leu Pro	Asn Phe Leu Ser Val	Glu Pro Arg Pro Phe Asp
340	345	350
Pro Gln Tyr Tyr Glu	Asp Glu Phe Glu Asp	Glu Glu Met Leu Asp Glu
355	360	365
Glu Gly Arg Thr Arg	Leu Lys Leu Lys Val	Glu Asn Thr Ile Arg Trp
370	375	380
Arg Ile Arg Arg Asp	Glu Glu Gly Asn Glu	Ile Lys Glu Ser Asn Ala
385	390	395
Arg Ile Val Lys Trp	Ser Asp Gly Ser Met	Ser Leu His Leu Gly Asn
405	410	415
Glu Val Phe Asp Val	Tyr Lys Ala Pro Leu	Gln Gly Asp His Asn His
420	425	430
Leu Phe Ile Arg Gln	Gly Thr Gly Leu Gln	Gly Gln Ala Val Phe Lys
435	440	445
Ala Lys Leu Thr Phe	Arg Pro His Ser Thr	Asp Ser Ala Thr His Arg
450	455	460
Lys Met Thr Leu Ser	Leu Ala Asp Arg Cys	Ser Lys Thr Gln Lys Ile
465	470	475
Arg Ile Leu Pro Met	Ala Gly Arg Asp Pro	Glu Cys Gln Arg Thr Glu
485	490	495
Met Ile Lys Lys Glu	Glu Glu Arg Leu Arg	Ala Ser Ile Arg Arg Glu
500	505	510
Ser Gln Gln Arg Arg	Met Arg Glu Lys Gln	His Gln Arg Gly Leu Ser
515	520	525
Ala Ser Tyr Leu Glu	Pro Asp Arg Tyr Asp	Glu Glu Glu Gly Glu
530	535	540
Glu Ser Ile Ser Leu	Ala Ala Ile Lys Asn	Arg Tyr Lys Gly Gly Ile
545	550	555
Arg Glu Glu Arg Ala	Arg Ile Tyr Ser Ser	Asp Ser Asp Glu Gly Ser
565	570	575
Glu Glu Asp Lys Ala	Gln Arg Leu Leu Lys	Ala Lys Lys Leu Thr Ser
580	585	590
Asp Glu Glu Gly Glu	Pro Ser Gly Lys Arg	Lys Ala Glu Asp Asp Asp
595	600	605
Lys Ala Asn Lys Lys	His Lys Lys Tyr Val	Ile Ser Asp Glu Glu Glu
610	615	620
Glu Asp Asp Asp		
625		

<210> 3495  
 <211> 1085  
 <212> DNA  
 <213> Homo sapiens

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 180  
 aagaaccccg atgagggcga gaagtttaaa ctcatatccc aggcataatga agtgctttca  
 240  
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc  
 300  
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 360  
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 420  
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 480  
 aaatgtgaag gtgttggtgg gaagaaggga tcggtggaga agtgcccgtc gtgcaagggg  
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 720  
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 780  
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 900  
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaaagcagg tgaggtgata  
 960  
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg  
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 1085

<210> 3496  
 <211> 337  
 <212> PRT  
 <213> Homo sapiens

<400> 3496  
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<210> 3497
<211> 1638
<212> DNA
<213> Homo sapiens

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120
tttttagtat atccttctaa aaagttttcc tgagaatttt tagtttggcc tctcaagttt
180
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240  
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300  
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1620  
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1638

&lt;210&gt; 3498

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3498

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      20           25           30
Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg
      35           40           45
Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
      50           55           60
Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
      65           70           75           80
Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
      85           90           95
Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
      100          105          110
Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
      115          120          125
Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
      130          135          140
Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
      145          150          155          160
Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
      165          170          175
Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
      180          185          190
Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
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Glu Ser
      210

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&lt;210&gt; 3499

&lt;211&gt; 732

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3499

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180
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240
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540

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720  
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732

&lt;210&gt; 3500

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3500

Phe	Phe	Phe	Pro	Ser	Gly	Lys	Pro	Phe	Gln	Asp	Ser	Asp	Val	Asp	Val
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Gly	Ala	Arg	Arg	Ser	Pro	Gly	Thr	Trp	Arg	Tyr	Arg	Gly	His	Ser	Ser
			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
			35				40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
	50					55					60				
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70					75				80	
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
				85				90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
			115				120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
			130				135				140				
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
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Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
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&lt;210&gt; 3501

&lt;211&gt; 691

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3501

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<211> 196

<212> PRT

<213> Homo sapiens

<400> 3502

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			20					25					30		
Glu	Ile	Lys	Leu	Tyr	Ala	Gln	Ile	Pro	Pro	Ile	Glu	Lys	Met	Asp	Ala
		35					40					45			
Ser	Leu	Ser	Met	Leu	Ala	Asn	Cys	Glu	Lys	Leu	Ser	Leu	Ser	Thr	Asn
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65					70				75					80	
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			85					90					95		
Val	Gly	Asp	Thr	Leu	Glu	Glu	Leu	Trp	Ile	Ser	Tyr	Asn	Phe	Ile	Glu
			100					105					110		
Lys	Leu	Lys	Gly	Ile	His	Ile	Met	Lys	Lys	Leu	Lys	Ile	Leu	Tyr	Met
		115					120					125			
Ser	Asn	Asn	Leu	Val	Lys	Asp	Trp	Ala	Glu	Phe	Val	Lys	Leu	Ala	Glu
	130					135					140				
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Lys	His	Ser	Ala	Glu	Asn	Asn	Trp	Ile	Glu	Glu	Ala	Thr	Lys	Arg	Val
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Pro	Lys	Leu	Lys	Lys	Leu	Asp	Gly	Thr	Pro	Val	Ile	Lys	Gly	Asp	Glu
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<210> 3503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3503

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&lt;210&gt; 3504

&lt;211&gt; 285

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3504

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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
			50			55					60				
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65					70					75				80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
				85				90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
			100					105					110		
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
			115				120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

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165	170	175
Thr Arg Gln Val Val	Lys Lys Tyr Trp Ala Ile	Thr Val His Val Pro
180	185	190
Met Pro Ser Ala Gly	Val Val Asp Ile Pro Ile	Val Glu Lys Glu Gly
195	200	205
Gln Gly Gln Gln Gln	His Pro Arg Met Thr	Leu Ser Pro Ser Ser Arg
210	215	220
Met Asp Asp Gly Lys	Met Val Lys Val Arg Arg	Ser Arg Asn Ala Gln
225	230	235
Val Ala Val Thr Gln	Tyr Gln Val Leu Ser Ser	Thr Leu Ser Ser Ala
245	250	255
Leu Val Glu Leu Gln	Pro Ile Thr Gly Ile Lys	His Gln Leu Arg Val
260	265	270
His Leu Ser Phe Gly	Leu Asp Cys Pro Ile	Leu Gly Asp
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&lt;210&gt; 3505

&lt;211&gt; 1612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3505

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&lt;210&gt; 3506

&lt;211&gt; 502

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3506

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		20						25					30		
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala
		35					40					45			
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp
	50				55						60				
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe
65				70					75					80	
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala
			85					90					95		
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val
		100						105					110		
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile
		115					120					125			
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser
		130				135					140				
Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg
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&lt;210&gt; 3508

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3508

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		20						25					30		
Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
		35					40					45			
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		115				120					125				
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Phe	Gln	Cys	His	Val	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln	
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Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

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 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro  
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 Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg  
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 Asp Ile Ser Thr Gly Lys Arg Arg Lys Glu Leu Gly Ala Met Ala Phe  
 195 200 205  
 Ser Thr Thr Ala Ile Asn Phe Ser Thr Val Asn Ser Ser Ala Gly Phe  
 210 215 220  
 Arg Ser Lys Gln Leu Val Asn Asn Lys Asp Thr Thr Ser Phe Glu Asp  
 225 230 235 240  
 Ile Ser Pro Gln Gly Val Ser Asp Asp Ser Ser Thr Gly Ser Arg Val  
 245 250 255  
 His Ala Ser Arg Pro Ala Ser Leu Asp Ser Gly Arg Thr Ser Thr Ser  
 260 265 270  
 Asn Ser Asn Asn Asn Ala Ser Leu His Glu Val Lys Ala Gly Ala Val

	275		280		285
Asn	Asn Gln Ser Arg Pro Gln Ser His Ser Ser Gly Glu Phe Ser Leu				
290		295		300	
Leu His Asp His Glu Ala Trp Ser Ser Ser Gly Ser Ser Pro Ile Gln					
305		310		315	320
Tyr Leu Lys Arg Gln Thr Arg Ser Ser Pro Val Leu Gln His Lys Ile					
	325		330		335
Ser Glu Thr Leu Glu Ser Arg His His Lys Ile Lys Thr Gly Ser Pro					
	340		345		350
Gly Ser Glu Val Val Thr Leu Gln Phe Leu Glu Glu Ser Asn Lys					
	355		360		365
Leu Thr Ser Val Gln Ile Lys Ser Ser Ser Gln Glu Asn Leu Leu Asp					
	370		375		380
Glu Val Met Lys Ser Leu Ser Val Ser Ser Asp Phe Leu Gly Lys Asp					
385		390		395	400
Lys Pro Val Ser Cys Gly Leu Ala Arg Ser Val Ser Gly Lys Thr Pro					
	405		410		415
Gly Asp Phe Tyr Asp Arg Arg Thr Thr Lys Pro Glu Phe Leu Arg Pro					
	420		425		430
Gly Pro Arg Lys Thr Glu Asp Thr Tyr Phe Ile Ser Ser Ala Gly Lys					
	435		440		445
Pro Thr Pro Gly Thr Gln Gly Lys Ile Lys Leu Val Lys Glu Ser Ser					
	450		455		460
Leu Ser Arg Gln Ser Lys Asp Ser Asn Pro Tyr Ala Thr Leu Pro Arg					
465		470		475	480
Ala Ser Ser Val Ile Ser Thr Ala Glu Gly Thr Thr Arg Arg Thr Ser					
	485		490		495
Ile His Asp Phe Leu Thr Lys Asp Ser Arg Leu Pro Ile Ser Val Asp					
	500		505		510
Ser Pro Pro Ala Ala Ala Asp Ser Asn Thr Thr Ala Ala Ser Asn Val					
	515		520		525
Asp Lys Val Gln Glu Ser Arg Asn Ser Lys Ser Arg Ser Arg Glu Gln					
	530		535		540
Gln Ser Ser					
545					

&lt;210&gt; 3517

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3517

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acctggcggg aggacccct tcaggctgct ttggcccgat cctgacttta gtgctggccg  
120

cctttgcttt ccatecgcta tagtggcctc ctttgctcctt gcgggggaaa ccgaggccac  
180

agccttgtag cgcatgcctg atcgcccgac ttcccgcccc ctgctcgtgc gggcctcact  
240

gtctccttct gggctggggg cttgcgacac cgccctccgg ccgactcgct cgtgggggtgc  
300

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342

<210> 3518  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

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 Trp Pro Asp Pro Asp Phe Ser Ala Gly Arg Leu Cys Phe Pro Ser Ala  
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 Ile Val Ala Ser Phe Val Leu Ala Gly Glu Thr Glu Ala Thr Ala Leu  
 35 40 45  
 Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala  
 50 55 60  
 Ser Leu Ser Pro Ser Gly Leu Gly Ala Cys Asp Thr Ala Leu Arg Pro  
 65 70 75 80  
 Thr Arg Ser Trp Gly Ala Cys Trp Gln Trp Leu Gly His Ser Cys Ser  
 85 90 95  
 Gly Gln Gly

<210> 3519  
 <211> 2207  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 480  
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 660  
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 720  
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960  
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2207

&lt;210&gt; 3520

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 3520  
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 20 25 30  
 Val Val Asn Leu Pro Pro Ala Gln Leu Ser Ser Ser Asp Glu Glu Thr  
 35 40 45  
 Arg Glu Glu Leu Ala Arg Ile Gly Leu Val Pro Pro Pro Glu Glu Phe  
 50 55 60  
 Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser  
 65 70 75 80  
 Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro  
 85 90 95  
 Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp  
 100 105 110  
 Thr Arg Ser Ser Ser Asp Pro His Leu Glu Thr Thr Ser Thr Ile Ser  
 115 120 125  
 Thr Val Ser Ser Met Ser Thr Leu Ser Ser Glu Ser Gly Glu Leu Thr  
 130 135 140  
 Asp Thr His Thr Ser Phe Ala Asp Gly His Thr Phe Leu Leu Glu Lys  
 145 150 155 160  
 Pro Pro Val Pro Pro Lys Pro Lys Leu Lys Ser Pro Leu Gly Lys Gly  
 165 170 175  
 Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu  
 180 185 190  
 Leu Met Ala Gln Gln His His Ala Ala Ser Ala Gly Leu Ala Ser Ala  
 195 200 205  
 Ala Gly Pro Ala Arg Pro Arg Tyr Leu Phe Gln Arg Arg Ser Lys Leu  
 210 215 220  
 Trp Gly Asp Pro Val Glu Ser Arg Gly Leu Pro Gly Pro Glu Asp Asp  
 225 230 235 240  
 Lys Pro Thr Val Ile Ser Glu Leu Ser Ser Arg Leu Gln Gln Leu Asn  
 245 250 255  
 Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser  
 260 265 270  
 Leu Leu Asp Pro Ala Lys Lys Ser Pro Ile Ala Ala Ala Arg Ser Pro  
 275 280 285  
 Leu Ser Ser Leu Gly Leu Gly Trp Tyr Val Asp Ala Thr Ser  
 290 295 300

<210> 3521  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240

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 420  
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 480  
 gacccttcaa cgccctctgt aagaggctct cagaggacgg catctccagg aagagcttcc  
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 638

<210> 3522

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

Cys	Leu	Pro	Gly	Gly	Leu	Cys	Ala	Ala	Ile	Pro	Leu	His	Leu	Pro	Leu
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Leu	Leu	His	Thr	Pro	Arg	Leu	Pro	Ala	Leu	Pro	Pro	Arg	Pro	His	Gln
		20						25				30			
Gln	His	Ala	Asp	Gln	Gly	Pro	Pro	Gly	Pro	His	Leu	Asp	Leu	His	Gln
		35				40					45				
Asp	Leu	Gln	Ala	Glu	Pro	Leu	Arg	Pro	Ala	Gly	Leu	Gly	Gly	Gly	Leu
50						55					60				
Leu	Arg	Cys	Gly	Leu	Pro	Ser	Glu	Gln	Arg	Ala	Ala	Gly	Glu	Ala	Arg
65					70				75						80
Gly	Leu	His	Leu	Leu	Gln	Asp	Pro	Thr	Pro	Gly	Arg	Leu	Cys	Gln	Ala
			85					90						95	
Pro	Ala	Gly	Pro	Pro	Gly	Gly	Gly	His	Gly	Pro	Ala	Gly	Arg	Gly	Gln
			100					105					110		
Pro	Ser	Arg	His	Arg	Pro	Gly	Glu	Pro	Gln	Gly	Gly	Arg	Gly	Gly	Xaa
		115					120					125			
Pro	Asp	Pro	Ser	Thr	Pro	Ser	Val	Arg	Gly	Ser	Gln	Arg	Thr	Ala	Ser
		130				135						140			
Pro	Gly	Arg	Ala	Ser	Pro	Gly	Gly	Cys	Pro	Glu	Ala	Thr	Gly	Trp	Cys
145					150					155					160
Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
			165					170						175	
Ser	Pro	Ala	Ser	Ser											
			180												

<210> 3523

<211> 2614

<212> DNA

<213> Homo sapiens

<400> 3523

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180  
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240  
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300  
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360  
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420  
gagctgcggg ccacagtgga gcggatgggg ctcatgaagg ccaaccatgt cttcttctg  
480  
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540  
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720  
cacatgcact tccagcacca tgccaagccc aactgcttcc gcaaagaccc agacatcaac  
780  
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1320  
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1380  
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 1920  
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 2340  
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 2520  
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 2580  
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 2614

&lt;210&gt; 3524

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3524

Met	Ala	Pro	Asp	Pro	Leu	Ala	Ala	Glu	Thr	Ala	Ala	Gln	Gly	Leu	Thr
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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
			20				25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
			35				40					45			
Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
			50				55				60				
Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
						70				75				80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
					85				90					95	
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
			100					105					110		
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

115 120 125  
 His Val Phe Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly  
 130 135 140  
 Ala Ala Trp Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe  
 145 150 155 160  
 Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp  
 165 170 175  
 Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp  
 180 185 190  
 Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro  
 195 200 205  
 Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn  
 210 215 220  
 Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala  
 225 230 235 240  
 Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr  
 245 250 255  
 Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro  
 260 265 270  
 Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile  
 275 280 285  
 Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val  
 290 295 300  
 Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu  
 305 310 315 320  
 Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp  
 325 330 335  
 Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn  
 340 345 350  
 Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys  
 355 360 365  
 Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu  
 370 375 380  
 His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala  
 385 390 395 400  
 Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser  
 405 410 415  
 Lys Pro Leu Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu  
 420 425 430  
 Ser Gly Gln Leu Trp Leu Asp Ala Tyr Leu His Gln  
 435 440

&lt;210&gt; 3525

&lt;211&gt; 1116

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3525

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 120  
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 240  
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 300  
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 360  
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 420  
 gctcagaatg gctcagaatc tgagggtggtg atggaaccag ccctggaagg cacaggcaaa  
 480  
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 720  
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 1080  
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 1116

&lt;210&gt; 3526

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3526

Ile	Thr	Asp	Glu	Lys	Arg	Ile	Phe	Phe	Tyr	Ile	Val	Ala	Val	Ala	Asp
1				5					10					15	
Ala	Lys	Lys	Ser	Arg	Glu	Phe	Asn	Pro	Asn	Asn	Ser	Thr	Ala	Val	Leu
			20				25					30			
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 <213> Homo sapiens

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&lt;210&gt; 3528

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3528

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&lt;211&gt; 3026

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3529

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   50                  55                  60  
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 Glu Glu Val Phe Glu Val Lys Val Glu Glu Leu Asp Glu Lys Trp Ala  
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                   100                  105                  110  
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&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3532

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&lt;400&gt; 3533

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35 40 45  
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys  
50 55 60  
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser  
65 70 75 80  
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg  
85 90 95  
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp  
100 105 110  
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile  
115 120 125  
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly  
130 135 140  
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys  
145 150 155 160  
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser  
165 170 175  
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser  
180 185 190  
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys  
195 200 205  
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser  
210 215 220  
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro  
225 230 235 240  
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser  
245 250 255  
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr  
260 265 270  
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr  
275 280 285  
Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly  
290 295 300  
Gly Phe Pro Leu Gly Pro Gln Cys Arg  
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<210> 3535  
<211> 723  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 3535

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 180  
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 240  
 gagattgcaa tctgtgcttt gaaccagatg cactattact aatagctgga ggaaattttg  
 300  
 aagatcagct tagagaagaa gtggtccaga gagtttctct tctccttctc tattacatta  
 360  
 ttcacagga agagatctgt tcttcaaagc tcaacatgag taataaagag tataaatttt  
 420  
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 480  
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 723

&lt;210&gt; 3536

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3536

Met Gln Gly Asp Cys Asn Leu Cys Phe Glu Pro Asp Ala Leu Leu Leu  
 1 5 10 15  
 Ile Ala Gly Gly Asn Phe Glu Asp Gln Leu Arg Glu Glu Val Gln  
 20 25 30  
 Arg Val Ser Leu Leu Leu Tyr Ile Ile His Gln Glu Glu Ile  
 35 40 45  
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu  
 50 55 60  
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser  
 65 70 75 80  
 Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp  
 85 90 95  
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser  
 100 105 110  
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu  
 115 120 125  
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln  
 130 135 140  
 Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

145  
Leu Asn Arg

150

155

160

<210> 3537  
<211> 714  
<212> DNA  
<213> Homo sapiens

<400> 3537  
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 120  
 cataaggcca agagtaagtg cgtgaatgca cttagacaa agtcaggaca cgagcttcac  
 180  
 atgacaggcc ccgctgtggc gaccagccag cctgggggac gggcacgcca cgccacacac  
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 420  
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 600  
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<210> 3538  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 3538  
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 Ser Trp Thr Leu Cys Lys His Phe Cys Ala Cys Trp Val Gly Ala Arg  
 20 25 30  
 Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly  
 35 40 45  
 Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg  
 50 55 60  
 Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly  
 65 70 75 80  
 His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg  
 85 90 95  
 Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

```

          100          105          110
Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro
          115          120          125
Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn
          130          135          140
Met Gln Trp Glu Ser Gln Ala Val Gln Trp
145          150

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<210> 3539  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens

<400> 3539  
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 cggggggcgg aggttgagc gagccgagat cgcgcaggta cgctccagtc tgggcgacaa  
 180  
 gagcgaaact cgatatcaaa aaaaaaaaaa acgtcctgat cccagagcct cttcacgcgt  
 240  
 cccctaccac agcacttcag agaagcaggt ctttaatcag tgtgtctaga tgcagctgct  
 300  
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 360  
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 420  
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 660  
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 720  
 cccgataatg agaccctcta ccgcagcggc ttgttgggct acgtcagtg gtttggcatg  
 780  
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 818

<210> 3540  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

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<400> 3540
Ser Val Cys Leu Asp Ala Ala Ala Asp Cys His Pro Tyr Pro Ala Ser
  1          5          10          15
Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr
          20          25          30
Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

```

```

      35              40              45
Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg
  50              55              60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys Asp Ser Val Ser
  65              70              75              80
Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile
      85              90              95
Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His Arg Val Val Val
      100              105              110
His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
      115              120              125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu
      130              135              140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu
  145              150              155              160
Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu
      165              170              175
Leu Lys Tyr Ser
      180

```

&lt;210&gt; 3541

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3541

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  120
acggctgctg cccttgctact actacctcca aatacgcttc tgctggtagt ggcggcagca
  180
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  240
aacgtggccg acagcacaga accaacgaaa cgtatgcttt cctccaagg gttagctgag
  300
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  360
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  420
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  480
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  600
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aa
  722

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&lt;210&gt; 3542

<211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 3542

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      20           25           30
Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp
      35           40           45
Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Leu Ser Ser Ile
      50           55           60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
      65           70           75           80
Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
      85           90           95
Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
      100          105          110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
      115          120          125
Ala Ala Ala Ala Leu Val Ala Ala Gly Asp Met Glu Gly Ala Val Gln
      130          135          140
Ala Tyr Val Ser Ala Leu Gln Pro Gly
      145          150

```

<210> 3543  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 3543

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120
gttttggttgt tgctcaggat gtgtaatagt ttctcttcag ccataagcca cgcttggtag
180
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240
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360
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480
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540
atattctgtc tgggtgcctt agtgagggcc tccataactg atccaggaag actccctgag
600
aaccccaaga tcccacatgg agaaaggag ttctgggaat tatgtaacaa gtgtaatttg
660

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atgagaccaa agcgttccca tcaactgtagc cgctgcggcc actgtgtgag gagaatggat  
 720  
 catcactgtc catggattaa caattgtgtt ggtgaagata atcattggct ctttctgcag  
 780  
 ttgtgtttct aactgaact tcttacttgc tacgcactga tgttttcttt ctgccactat  
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 900  
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<210> 3544

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3544

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Met	Gly	Leu	Ile	Val	Phe	Val	Trp	Leu	Tyr	Asn	Ile	Val	Leu	Ile	Pro
			20					25					30		
Lys	Ile	Val	Leu	Phe	Pro	His	Tyr	Glu	Glu	Gly	His	Ile	Pro	Gly	Ile
		35					40					45			
Leu	Ile	Ile	Ile	Phe	Tyr	Gly	Ile	Ser	Ile	Phe	Cys	Leu	Val	Ala	Leu
	50					55					60				
Val	Arg	Ala	Ser	Ile	Thr	Asp	Pro	Gly	Arg	Leu	Pro	Glu	Asn	Pro	Lys
65					70				75					80	
Ile	Pro	His	Gly	Glu	Arg	Glu	Phe	Trp	Glu	Leu	Cys	Asn	Lys	Cys	Asn
			85					90					95		
Leu	Met	Arg	Pro	Lys	Arg	Ser	His	His	Cys	Ser	Arg	Cys	Gly	His	Cys
			100					105					110		
Val	Arg	Arg	Met	Asp	His	His	Cys	Pro	Trp	Ile	Asn	Asn	Cys	Val	Gly
		115					120					125			
Glu	Asp	Asn	His	Trp	Leu	Phe	Leu	Gln	Leu	Cys	Phe	Tyr	Thr	Glu	Leu
	130					135					140				
Leu	Thr	Cys	Tyr	Ala	Leu	Met	Phe	Ser	Phe	Cys	His	Tyr	Tyr	Tyr	Phe
145					150				155						160
Leu	Pro	Leu	Lys	Lys	Arg	Asn	Leu	Asp	Leu	Phe	Val	Phe	Arg	His	Glu
			165					170						175	
Leu	Ala	Ile	Met	Arg	Leu	Ala	Ala	Phe	Met	Gly	Ile	Thr	Met	Leu	Val
		180					185						190		
Gly	Ile	Thr	Gly	Leu	Phe	Tyr	Thr	Gln	Leu	Ile	Gly	Ile	Ile	Thr	Pro
	195						200					205			
Cys	Ser	Leu	Ile	Leu	Leu	Lys	Cys	Gly	Ser	Val	Ser	Asn	Asn	Ser	Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala Leu Arg Ile Pro Ser		
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser Leu Arg Val Phe Asn Ser		240
	245	250
Val Lys Leu Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln Trp Ser Thr		255
	260	265
		270

Lys

&lt;210&gt; 3545

&lt;211&gt; 3657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

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1140

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&lt;210&gt; 3546

&lt;211&gt; 792

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3546

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Leu	Ala	Asp	Pro	Gly	Trp	Ala	Ser	Ile	Ser	Arg	Gly	Val	Leu	Val	Cys
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Asp	Glu	Cys	Cys	Ser	Val	His	Arg	Ser	Leu	Gly	Arg	His	Ile	Ser	Ile
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Val	Lys	His	Leu	Arg	His	Ser	Ala	Trp	Pro	Pro	Thr	Leu	Leu	Gln	Met
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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Leu	Leu	Asp	Pro	Ala	Gln	Val	Gln	Ser	Gly	Arg	Arg	Lys	Ala	Asn	Pro
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Gln	Asp	Lys	Val	His	Pro	Ile	Lys	Ser	Glu	Phe	Ile	Arg	Ala	Lys	Tyr
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Gln	Met	Leu	Ala	Phe	Val	His	Lys	Leu	Pro	Cys	Arg	Asp	Asp	Asp	Gly

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 Asn Phe Phe His Pro Glu Lys Gly Thr Thr Pro Leu His Val Ala Ala  
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 Lys Ala Gly Gln Thr Leu Gln Ala Glu Leu Leu Val Val Tyr Gly Ala  
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 Asp Pro Gly Ser Pro Asp Val Asn Gly Arg Thr Pro Ile Asp Tyr Ala  
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 Arg Gln Ala Gly His His Glu Leu Ala Glu Arg Leu Val Glu Cys Gln  
 225 230 235 240  
 Tyr Glu Leu Thr Asp Arg Leu Ala Phe Tyr Leu Cys Gly Arg Lys Pro  
 245 250 255  
 Asp His Lys Asn Gly His Tyr Ile Ile Pro Gln Met Ala Asp Arg Ser  
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 Asp Thr Asp Gln Glu Pro Leu Arg Ser Thr Gly Ala Thr Arg Ser Asn  
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 Arg Ala Arg Ser Met Asp Ser Ser Asp Leu Ser Asp Gly Ala Val Thr  
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 Ala Glu Asn Leu Gln Leu Arg Gln Pro Pro Gly Pro Val Pro Thr Pro  
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<211> 1039
<212> DNA
<213> Homo sapiens
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<211> 346

<212> PRT

<213> Homo sapiens

<400> 3548

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Val	Phe	Glu	Leu	Met	Gly	Ser	Ile	Val	Thr	Glu	Ile	Ala	Cys	Gly	Arg
	50					55					60				
Gln	His	Thr	Ser	Ala	Phe	Val	Pro	Ser	Ser	Gly	Arg	Ile	Tyr	Ser	Phe
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Gly	Leu	Gly	Gly	Asn	Gly	Gln	Leu	Gly	Thr	Gly	Ser	Thr	Ser	Asn	Arg
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Lys	Ser	Pro	Phe	Thr	Val	Lys	Gly	Asn	Trp	Tyr	Pro	Tyr	Asn	Gly	Gln
		100						105					110		
Cys	Leu	Pro	Asp	Ile	Asp	Ser	Glu	Tyr	Phe	Cys	Val	Lys	Arg	Ile	
		115					120				125				
Phe	Ser	Gly	Gly	Asp	Gln	Ser	Phe	Ser	His	Tyr	Ser	Ser	Pro	Gln	Asn
	130					135					140				
Cys	Gly	Pro	Pro	Asp	Asp	Phe	Arg	Cys	Pro	Asn	Pro	Thr	Lys	Gln	Ile
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Trp	Thr	Val	Asn	Glu	Ala	Leu	Ile	Gln	Lys	Trp	Leu	Ser	Tyr	Pro	Ser
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Gly	Arg	Phe	Pro	Val	Glu	Ile	Ala	Asn	Glu	Ile	Asp	Gly	Thr	Phe	Ser
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Ser	Ser	Gly	Cys	Leu	Asn	Gly	Ser	Phe	Leu	Ala	Val	Ser	Asn	Asp	Asp
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His	Tyr	Arg	Thr	Gly	Thr	Arg	Phe	Ser	Gly	Val	Asp	Met	Asn	Ala	Ala
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Arg	Leu	Leu	Phe	His	Lys	Leu	Ile	Gln	Pro	Asp	His	Pro	Gln	Ile	Ser

225		230		235		240
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Ser Ser Leu Pro Asp Val Glu Ala Leu Arg Phe Tyr Leu Thr Leu Pro						
	260		265		270	
Glu Cys Pro Leu Met Ser Asp Ser Asn Asn Phe Ile Thr Ile Ala Ile						
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Pro Phe Gly Thr Ala Leu Val Asn Leu Glu Lys Ala Pro Leu Lys Val						
	290		295		300	
Leu Glu Asn Trp Trp Ser Val Leu Glu Pro Pro Leu Phe Leu Lys Ile						
305		310		315		320
Val Glu Leu Phe Lys Glu Val Val Val His Leu Leu Lys Leu Tyr Lys						
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Ile Gly Ile Pro Pro Ser Glu Arg Ile Ile						
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&lt;210&gt; 3549

&lt;211&gt; 2542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3549

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 <212> PRT  
 <213> Homo sapiens

<400> 3550

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			20					25					30		
His	Cys	Arg	Pro	Ser	Arg	Arg	Gly	Arg	Tyr	Glu	Lys	Ile	His	Gly	Arg
		35					40					45			
Ser	Lys	Glu	Lys	Glu	Arg	Ala	Ser	Leu	Asp	Lys	Lys	Arg	Asp	Lys	Asp
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Tyr	Arg	Arg	Lys	Glu	Ile	Leu	Pro	Phe	Glu	Lys	Met	Lys	Glu	Gln	Arg
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Leu	Arg	Glu	His	Leu	Val	Arg	Phe	Glu	Arg	Leu	Arg	Arg	Ala	Met	Glu
			85					90						95	
Leu	Arg	Arg	Arg	Arg	Glu	Ile	Ala	Glu	Arg	Glu	Arg	Arg	Glu	Arg	Glu
			100					105					110		
Arg	Ile	Arg	Ile	Ile	Arg	Glu	Arg	Glu	Glu	Arg	Glu	Arg	Leu	Gln	Arg
		115				120						125			
Glu	Arg	Glu	Arg	Leu	Glu	Ile	Glu	Arg	Gln	Lys	Leu	Glu	Arg	Glu	Arg
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Met	Glu	Arg	Glu	Arg	Leu	Glu	Arg	Glu	Arg	Ile	Arg	Ile	Glu	Gln	Glu
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Arg	Arg	Lys	Glu	Ala	Glu	Arg	Ile	Ala	Arg	Glu	Arg	Glu	Glu	Leu	Arg
				165					170					175	
Arg	Gln	Gln	Gln	Gln	Leu	Arg	Tyr	Glu	Gln	Glu	Lys	Arg	Asn	Ser	Leu
			180					185						190	
Lys	Arg	Pro	Arg	Asp	Val	Asp	His	Arg	Arg	Asp	Asp	Pro	Tyr	Trp	Ser
		195				200						205			
Glu	Asn	Lys	Lys	Leu	Ser	Leu	Asp	Thr	Asp	Ala	Arg	Phe	Gly	His	Gly
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Ser	Asp	Tyr	Ser	Arg	Gln	Gln	Asn	Arg	Phe	Asn	Asp	Phe	Asp	His	Arg
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Glu	Arg	Gly	Arg	Phe	Pro	Glu	Ser	Ser	Ala	Val	Gln	Ser	Ser	Ser	Phe
				245					250					255	
Glu	Arg	Arg	Asp	Arg	Phe	Val	Gly	Gln	Ser	Glu	Gly	Lys	Lys	Ala	Arg
			260					265						270	
Pro	Thr	Ala	Arg	Arg	Glu	Asp	Pro	Ser	Phe	Glu	Arg	Tyr	Pro	Lys	Asn
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Phe	Ser	Asp	Ser	Arg	Arg	Asn	Glu	Pro	Pro	Pro	Pro	Pro	Arg	Asn	Glu
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Thr	Val	Ile	Ile	His	Asp	Arg	Pro	Asp	Ile	Thr	His	Pro	Arg	His	Pro
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Arg	Glu	Ala	Gly	Pro	Asn	Pro	Ser	Arg	Pro	Thr	Ser	Trp	Lys	Ser	Asp
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Gly	Ser	Met	Ser	Thr	Asp	Lys	Arg	Glu	Thr	Arg	Val	Glu	Arg	Pro	Glu
		355					360					365			
Arg	Ser	Gly	Arg	Glu	Val	Ser	Gly	His	Ser	Val	Arg	Gly	Ala	Pro	Pro

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Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg				
385		390		400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu				
	405		410	415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys				
	420		425	430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg				
	435		440	445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser				
	450		455	460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser				
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Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro				
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Pro Arg Arg Phe				
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 <212> DNA  
 <213> Homo sapiens

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Arg	Glu	Ala	Val	Ser	Leu	Ser									
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 <212> DNA  
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<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
		35					40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85					90						95	
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
			100					105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
		115					120					125			
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135				140					
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145				150					155					160	
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
		180						185				190			
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
	195					200						205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser
225				230					235					240	
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
			245					250					255		
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
		260					265					270			
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
	275					280					285				
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290				295					300					
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305				310					315					320	
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

				325					330					335					
Ser	Gly	Cys	Pro	Leu	Pro	Glu	Ala	Cys	Glu	Leu	Tyr	Tyr	Val	Asn	Arg				
			340					345						350					
Asp	Thr	Leu	Phe	Cys	Tyr	His	Lys	Ala	Ser	Glu	Val	Phe	Leu	Gln	Arg				
		355					360						365						
Leu	Met	Ala	Leu	Tyr	Val	Ala	Ser	His	Tyr	Lys	Asn	Ser	Pro	Asn	Asp				
	370					375					380								
Leu	Gln	Met	Leu	Ser	Asp	Ala	Pro	Ser	His	His	Leu	Phe	Cys	Leu	Leu				
385					390					395					400				
Pro	Pro	Val	Pro	Pro	Thr	Gln	Asn	Ala	Leu	Pro	Lys	Val	Leu	Ala	Val				
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Ile Gln Val

<210> 3555  
 <211> 1038  
 <212> DNA  
 <213> Homo sapiens

<400> 3555  
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 120  
 atgaaccagg cgttgcagag gcgcttcgcc aaggggggtgc agtacaacat gaagatagtg  
 180  
 atccgggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca gggccggccc  
 240  
 ttcgtggagg agtacatccc cacacaggag atccaggcca ccagcatcca ctggagctac  
 300  
 aagaccacgg atgacatcgt gaagggtgaa gtctgggatg tagtagacaa aggaaaatgc  
 360  
 aaaaagcgag gcgacggcct aaagatggag aacgaccccc aggaggcgga gtctgaaatg  
 420  
 gccctggatg ctgagttcct ggacgtgtac aagaactgca acgggggtgg catgatgttc  
 480  
 gacattacca agcagtggac cttcaattac attctccggg agcttccaaa agtgcccacc  
 540  
 cacgtgccag tgtgcgtgct ggggaactac cgggacatgg gcgagcaccg agtcacnnc  
 600  
 tgccggacgn acgtgcgtga cttcatcgac aacctggaca gacctccagg ttctcctac  
 660  
 ttccgctatg ctgagtcttc catgaagaac agcttcggcc taaagtacct tcataagttc  
 720  
 ttcaatatcc catttttgca gcttcagagg gagacgctgt tgccggcagct ggagacgaac  
 780  
 cagctggaca tggacgccac gctggaggag ctgtcgggtgc agcaggagac ggaggaccag  
 840  
 aactacggca tcttcctgga gatgatggag gctcgcagcc gtggccatgc gtccccactg  
 900  
 gcggccaacg ggcagagccc atccccgggc tcccagtcac cagtgggtgcc tgcaggcgct  
 960  
 gtgtccacgg ggagctccag ccccggcaca gccagcccc cccacagct gccctcaat  
 1020

ggttgcccca ccatactc  
1038

<210> 3556  
<211> 333  
<212> PRT  
<213> Homo sapiens

<400> 3556

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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu
			20					25					30		
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile
			35				40					45			
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln
			50			55					60				
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val
65					70				75					80	
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val
			85						90					95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp
			100					105					110		
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala
		115					120					125			
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val
	130					135					140				
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg
145					150					155					160
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn
			165					170						175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val
			180					185					190		
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe
		195				200					205				
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu
	210					215					220				
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu
225					230					235					240
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu
			245					250						255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe
			260					265					270		
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala
		275					280				285				
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro
	290					295					300				
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro
305					310					315					320
Ala	Pro	Gln	Leu	Pro	Leu	Asn	Gly	Cys	Pro	Thr	Ile	Leu			
			325					330							

<210> 3557  
<211> 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

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ccggcattga tcaagtccat ctgggctatg gccataagcc aacaccagtt ctatctggac  
120  
agaaagcaga gtaagtccaa aatccatgca gcacgcagcc tgagtgcagat cgccatcgac  
180  
ctgaccgaga cggggacgct gaagacctcg aagctggcca acatgggtag caaggggaag  
240  
atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc  
300  
attctactcc caggttctca ggaatcagat agctgcagc cggccaagaa ggacatgctg  
360  
gctgccttga agtccaggca ggaagctctg gaggaaaccc tgcgtcagag gctggaggaa  
420  
ctgaagaagc tgtgtctccg agaagctgag ctcacgggca agctgccagt agaatatccc  
480  
ctggat  
486

&lt;210&gt; 3558

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
1				5				10						15	
Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40					45			
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50				55						60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65				70						75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90					95		
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115				120						125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130					135					140				
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145					150					155					160
Leu	Asp														

&lt;210&gt; 3559

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

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 60  
 ggccgcgggt ccccccgcacc tgcggccatg gatgaggagc gcgccctcta catcgccgg  
 120  
 gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct  
 180  
 actttcaaat ttgaatcaac agatgaagat aaaagaaaga aactctgtga aggcatattt  
 240  
 aaagtcctta taaaggacat cccaacaaca tgtcaagtgt cctgcctgga agtactccgc  
 300  
 attctctcca gagacaaaaa ggttttagtt cctgtgacaa ctaaggaaaa tatgcagata  
 360  
 ctgctgcgac tagccaagct aaatgagtta gatgattctt tggagaaagt atcagagttc  
 420  
 ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca  
 480  
 cagcagctca gcctggaact taatcttgct gcaaagctct gtaacctctt gagaaagtgc  
 540  
 aaggaccgga aatttatcaa tgacattaag tgctttgact tgcgcttgct cttccttctg  
 600  
 tcacttttgc acaccgacat caggtcacaa ttgcgctatg agctccaggg actaccgctg  
 660  
 ctaacgcaga tcg  
 673

&lt;210&gt; 3560

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3560

Met	Asp	Glu	Glu	Arg	Ala	Leu	Tyr	Ile	Val	Arg	Ala	Gly	Glu	Ala	Gly
1				5					10					15	
Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr
			20					25					30		
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu
		35					40					45			
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val
	50					55				60					
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu
65					70				75					80	
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala
				85				90						95	
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro
		100						105					110		
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser
		115					120					125			
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu
	130					135					140				
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile

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145          150          155          160
Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr
          165          170          175
Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu
          180          185          190
Thr Gln Ile
          195

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<210> 3561
<211> 523
<212> DNA
<213> Homo sapiens

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<400> 3561
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120
ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
180
gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgaggatgatg
240
ctggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcagggttc
300
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360
caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtgg
420
aagcggaggt ttggtgggtg ttttctactt tgactttctca ttgcactaaa catacaactc
480
tccagggatga cggggaagag gagtggggca aaggggtgtg cac
523

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<210> 3562
<211> 106
<212> PRT
<213> Homo sapiens

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<400> 3562
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1      5      10      15
Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val
20     25     30
Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
35     40     45
Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
50     55     60
Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
65     70     75     80
Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
85     90     95
Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
100    105

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<210> 3563  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 3563  
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 60  
 cgaagccagg ggcgcgcggc gatgtgagcc atgagcgcga cgtggacgct gtcgccggag  
 120  
 cccctgccgc cgtcgacggg gccccagtg ggcgcgggcc tggacgcgga gcagcgcacg  
 180  
 gtgttcgcct tcgtgctctg cctgctcgtg gtgctggtgc tgttgatggt gcgctgcgtg  
 240  
 cgcacccctgc tcgaccccta cagccgcacg cccgcctcgt cctggaccga ccacaaggag  
 300  
 gcgctcgagc gcgggcagtt cgactacgcg ttggtgtgag gggcgcggcg ccccctagg  
 359

<210> 3564  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 3564  
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 Gly Pro Pro Val Gly Ala Gly Leu Asp Ala Glu Gln Arg Thr Val Phe  
 20 25 30  
 Ala Phe Val Leu Cys Leu Leu Val Val Leu Leu Met Val Arg  
 35 40 45  
 Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser  
 50 55 60  
 Trp Thr Asp His Lys Glu Ala Leu Glu Arg Gly Gln Phe Asp Tyr Ala  
 65 70 75 80  
 Leu Val

<210> 3565  
 <211> 580  
 <212> DNA  
 <213> Homo sapiens

<400> 3565  
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 cgtgagcagg cacaggagac cttccgcgcc gccggccggg cgaccccgca ggaagtagga  
 120  
 aggacgagcg cgcacttcaa gtcccagaag cccccgtttc ctggagcccg cgccgtgccg  
 180  
 cgctacgccc gccgggagcc gggcagagcg gccaaagtgt cgcagcccaa gaaaagaaag  
 240  
 cttgagtcgg ggggcggcgc cgaaggaggg gaggggaactg aagaggaaga tggcgcggag  
 300

cgggaggcgg ccctggagcg accccggacg actaagcggg aacgggacca gctgtactac  
 360  
 gagtgctact cggacgtttc ggtccacgag gagatgatcg cggaccgcgt ccgcaccgat  
 420  
 gcctaccgct gggtttccct tcggaactgg gcagcactgc gaggcaagac ggtactggac  
 480  
 gtgggcgcgg gcaccggcat tctgagcatc ttctgtgcc aggccggggc ccggcgcgctg  
 540  
 tacgcggtag aggccagcgc catctggcaa caggcccggg  
 580

<210> 3566  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 3566  
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 Gln Asn Ser Ser Arg Glu Gln Ala Gln Glu Thr Phe Arg Ala Ala Gly  
 20 25 30  
 Arg Ala Thr Pro Gln Glu Val Gly Arg Thr Ser Ala His Phe Lys Ser  
 35 40 45  
 Gln Lys Pro Pro Phe Pro Gly Ala Arg Ala Val Pro Arg Tyr Ala Arg  
 50 55 60  
 Arg Glu Pro Gly Arg Ala Ala Lys Met Ser Gln Pro Lys Lys Arg Lys  
 65 70 75 80  
 Leu Glu Ser Gly Gly Gly Ala Glu Gly Gly Glu Gly Thr Glu Glu Glu  
 85 90 95  
 Asp Gly Ala Glu Arg Glu Ala Ala Leu Glu Arg Pro Arg Thr Thr Lys  
 100 105 110  
 Arg Glu Arg Asp Gln Leu Tyr Tyr Glu Cys Tyr Ser Asp Val Ser Val  
 115 120 125  
 His Glu Glu Met Ile Ala Asp Arg Val Arg Thr Asp Ala Tyr Arg Trp  
 130 135 140  
 Val Ser Leu Arg Asn Trp Ala Ala Leu Arg Gly Lys Thr Val Leu Asp  
 145 150 155 160  
 Val Gly Ala Gly Thr Gly Ile Leu Ser Ile Phe Cys Ala Gln Ala Gly  
 165 170 175  
 Ala Arg Arg Val Tyr Ala Val Glu Ala Ser Ala Ile Trp Gln Gln Ala  
 180 185 190  
 Arg

<210> 3567  
 <211> 2811  
 <212> DNA  
 <213> Homo sapiens

<400> 3567  
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 60  
 ccttgagaaa gagccagaag gaagctgaac tgaccctga actggagaaa cagaaggaaa  
 120

ataagcaggt ggaagagatc ctccgtctgg agaaagaaat cgaggacctg cagcgcatga  
180  
aggagcagca ggagctgtcg ctgaccgagg cttccctgca gaagctgcag gagcggcggg  
240  
accaggagct ccgcaggctg gaggaggaga tttttgcacc tgaaaaaggc agccatagtt  
300  
ttccagaagc aactcagagg tcagattgct cggagagtth acagacaatt gctggcagag  
360  
aaaagggagc aagaagaaaa gaagaaacag gaagaggaag aaaagaagaa acgggaggaa  
420  
gaagaaagag aaagagagag agagcgaaga gaagccgagc tccgcgcca gcaggaagaa  
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600  
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720  
tgcagggcgg cccaggagtt cctcgagtcc ctcaatttcg acgagatcga cgagtgtgct  
780  
cggaatatcg agcgggtccct gtcgggggga agcgaatttt ccagcgagct ggctgagagc  
840  
gcatgcgagg agaagcccaa cttcaacttc agccagccct acccagagga ggaggtcgat  
900  
gagggcttcg aagccgacga cgacgccttc aaggactccc ccaacccag cgagcacggc  
960  
cactcagacc agcgaacaag tggcatccgg accagcgatg actcttcaga ggaggacca  
1020  
tacatgaacg acacggtggt gccaccagc cccagtgcgg acagcacggt gctgctcgcc  
1080  
ccatcagtgc aggactccgg gagcctacac aactcctcca gcggcgagtc cacctactgc  
1140  
atgccccaga acgctgggga cttgccctcc ccagacggcg actacgacta cgaccaggat  
1200  
gactatgagg acggtgccat cacttcgggc agcagcgtga cttctccaa ctctacggc  
1260  
agccagtggc ccccgacta ccgctgctct gtggggacct acaacagctc ggggtgcctac  
1320  
cggttcagct ctgagggggc gcagtcctcg tttgaagata gtgaagagga ctttgattcc  
1380  
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1440  
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1560  
aagcaaggct ggctcccaa aaaagggggg ggctcctcca cgctgtccag gagaaattgg  
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1680  
gagaagctca agggcaccgt agaagtgcga acggcaaaag agatcataga taacaccacc  
1740

aaggagaatg ggatcgacat cattatggcc gataggactt tccacctgat tgcagagtcc  
1800  
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&lt;211&gt; 869

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3568

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&lt;211&gt; 5070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3569

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 <212> DNA  
 <213> Homo sapiens

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<400> 3571
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120
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180
tcactctcgc atctgctggt cctcgggctg tatcttgggc cacagccgga ctcacggcct
240
gcactgctgc cgcaggtgag cacgcaagta gcacaggctg cgctcaggac ggctctgcca
300
cgtgctagta ggctcctttt agggggttgt tgagctgtga ctccaaggca aggtgcaacg
360
ctgggcgag gatacccaac cgtgctttcg cagagctggt acaacagtgt gatgcaatgc
420
ctgctgttac cagaagaggg atccaggcca cacggaaggg agtcgtgtcg tggtttaccc
480
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528

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<210> 3572  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

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<400> 3572
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His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val
20        25        30
Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
35        40        45
Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His

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50		55		60											
Leu	Leu	Val	Leu	Gly	Leu	Tyr	Leu	Gly	Pro	Gln	Pro	Asp	Ser	Arg	Pro
65			70					75						80	
Ala	Leu	Leu	Pro	Gln	Val	Ser	Thr	Gln	Val	Ala	Gln	Ala	Ala	Leu	Arg
			85					90						95	
Thr	Ala	Leu	Pro	Arg	Ala	Ser	Arg	Leu	Leu	Leu	Gly	Gly	Cys		
			100					105					110		

&lt;210&gt; 3573

&lt;211&gt; 1236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3573

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120
ccctgcctgc tccccaaagc ccagccttca gcccccccaa tcaatccag ccacacacac
180
agtcccattht tttccatcca ttctgggtact tgtgtgttca ataaacctgg tggacacaca
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480
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540
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600
ctcacagacc ttgccggcaa ccgcagattt ggtttctgcc gcctgcgggc gggtagccag
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720
acagtgggag acctcctagc ccaggaccaa gtcaccgagg cagaggaact tcttcaaaat
780
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840
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1020
gccgagagaa gactcctgct caccgccagc aaactcagca cctgagggcg gggtagccgc
1080
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1200

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1236

<210> 3574

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3574

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			20					25					30		
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
			35				40					45			
Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
			50			55					60				
Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
65					70					75				80	
Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
				85				90					95		
Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
			100					105					110		
Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
			115				120					125			
Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
			130			135					140				
Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
145					150					155				160	
Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
				165					170					175	
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
			180					185					190		
Arg	Leu	Arg	Ala	Gly	Thr	Gln	Ser	Cys	Leu	Cys	Ile	Leu	Ser	His	Leu
			195				200					205			
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
	210					215					220				
Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu	Leu	Leu	Gln	Asn	Leu
225					230					235				240	
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
				245					250					255	
Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
			260					265					270		
Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
		275					280					285			
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290					295					300				
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310					315				320	
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
				325					330				335		
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
			340					345					350		
Arg	Asp	Lys	Gly	Ala	Asp	Ser	Leu	Leu							

355

360

&lt;210&gt; 3575

&lt;211&gt; 769

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3575

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 gcatataagc aacgtgaggt gcagttggag gataaatatg atagtttggg aacaccattc  
 120  
 cagtcaaagg tgctggagtt gtgtctgtat agaagtaagt cgtcccacca acagtttcct  
 180  
 tttggatcac ctgaccagaa gacggagtct gagaaacagg attattaaca gatgtagagg  
 240  
 cactagaagg caccatgtaa cttgctggat ttggagtgtg acttcttctt ctgggagcag  
 300  
 gagaagtatg tggagtaatc ttgggggaat gaagagggga agaccagca gacaacgaca  
 360  
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 420  
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 480  
 caaagatgaa ggaaataatt ttatcttggt ttgttgtaga aaaagctctg attaaagcaa  
 540  
 atgtaaagtt tcttttttca aatgtactta ttccaaata tgtagcaga tttactgcaa  
 600  
 gaatagtctc ctccatatca aggtttacat caggaaattt aatagcaaga gtgaccaaaa  
 660  
 atttaataaa ttaatggaag agtgggaagt aacagaattg tggctcttta taaaattatg  
 720  
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 769

&lt;210&gt; 3576

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3576

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Ser	Thr	Phe	Glu	Lys	Arg	Asn	Phe	Thr	Phe	Ala	Leu	Ile	Arg	Ala	Phe
			20					25					30		
Ser	Thr	Thr	Lys	Gln	Asp	Lys	Ile	Ile	Ser	Phe	Ile	Phe	Ala	Leu	Thr
			35				40					45			
Ile	Pro	Lys	Met	Met	Phe	Leu	Pro	Asn	Glu	Cys	Leu	His	Phe	Ile	Phe
	50				55				60						
Gln	Thr	Cys	Ser	Leu	Lys	Pro	Ile	Ile	Ala	Pro	Leu	Arg	Asn	Ile	Phe
65				70					75				80		
Thr	Ser	Ser	Ser	Gly	Met	Ser	Leu	Ser	Ala	Gly	Ser	Ser	Pro	Leu	His
				85				90					95		
Ser	Pro	Lys	Ile	Thr	Pro	His	Thr	Ser	Pro	Ala	Pro	Arg	Arg	Arg	Ser

			100					105					110				
His	Thr	Pro	Asn	Pro	Ala	Ser	Tyr	Met	Val	Pro	Ser	Ser	Ala	Ser	Thr		
		115					120					125					
Ser	Val	Asn	Asn	Pro	Val	Ser	Gln	Thr	Pro	Ser	Ser	Gly	Gln	Val	Ile		
	130					135					140						
Gln	Lys	Glu	Thr	Val	Gly	Gly	Thr	Thr	Tyr	Phe	Tyr	Thr	Asp	Thr	Thr		
145					150					155					160		
Pro	Ala	Pro	Leu	Thr	Gly	Met	Val	Phe	Pro	Asn	Tyr	His	Ile	Tyr	Pro		
			165					170					175				
Pro	Thr	Ala	Pro	His	Val	Ala	Tyr	Met	Gln	Pro	Lys	Ala	Asn	Ala	Pro		
		180					185						190				
Ser	Phe	Phe	Met	Ala	Asp	Glu	Leu	Arg	Gln	Glu	Leu	Ile					
	195						200					205					

&lt;210&gt; 3577

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3577

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120
gtgattgggg agagcatgta cggggacttt gaggaagctt ttgaccatct gcagaacaga
180
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240
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300
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360
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420
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480
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600
caactactac gttgcccata ctccagtcac ctacagccag ccttacccta cctggctgcc
660
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720
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780
tgattctgct tttttttttt tttttccttt gtgtacccat tggaatgggt ctacagtgtg
840
tcatgagcca accctcaaag gaccctgatt acagtgccac gttggaaaac gctacaggaa
900
gcatgaccta tccacatctt tccaagatag acactaacat gtcattgtccc aaacattagc
960
acgtgggggt tgagctctgt gcagtaatcg agattgggag aatttgggca gcgcgtgaga
1020

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 1140  
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 1200  
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 1225

<210> 3578  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 3578  
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 20 25 30  
 Ile Ser Glu His Phe His Pro Thr Val Ile Gly Glu Ser Met Tyr Gly  
 35 40 45  
 Asp Phe Glu Glu Ala Phe Asp His Leu Gln Asn Arg Leu Ile Ala Thr  
 50 55 60  
 Lys Asn Pro Glu Glu Ile Arg Gly Gly Gly Leu Leu Lys Tyr Ser Asn  
 65 70 75 80  
 Leu Leu Val Arg Asp Phe Arg Pro Thr Asp Gln Glu Glu Ile Lys Thr  
 85 90 95  
 Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro Asp Ile  
 100 105 110  
 Leu Glu Gln Gln Arg Lys Leu Glu Thr Tyr Leu Gln Asn His Phe Ala  
 115 120 125  
 Glu Glu Glu Arg Ser Lys Tyr Asp Tyr Leu Met Ile Leu Arg Arg Val  
 130 135 140  
 Val Asn Glu Ser Thr Val Cys Leu Met Gly His Glu Arg Arg Gln Thr  
 145 150 155 160  
 Leu Asn Leu Ile Ser Leu Leu Ala Leu Arg Val Leu Gly Gly Thr Lys  
 165 170 175  
 His His Pro Pro Val Pro Pro Arg Ser Pro Val Thr Thr Ser Gly Pro  
 180 185 190  
 Leu Ser Gln  
 195

<210> 3579  
 <211> 755  
 <212> DNA  
 <213> Homo sapiens

<400> 3579  
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 120  
 cagatactcc agccacccgc aaggttccag gaaaggacaa tgcctgcga gaaaatcagg  
 180

aggcctccac ttcttgggcc acttgagaag ttcttgggca tgtcactaca tgttggttga  
 240  
 ctcagccatt tctcatgctg ttttgtttct tgcggtggcc acttaacccc aaagaatgaa  
 300  
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 360  
 aacatctttt cctttgctct atgggaacat tttagggttt gttttgcaca gctggtttcc  
 420  
 agactagaag attaacaagt ttgggtccac ccctaagaat cagtggctgt cttttaaggt  
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 540  
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 660  
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<210> 3580

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3580

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Ser	Leu	Trp	Ile	Leu	Pro	Ser	Phe	Phe	Gly	Val	Lys	Trp	Pro	Pro	Gln
			20					25					30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
		35					40					45			
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
		50				55					60				
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70					75					80	
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85						90					95	
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
			100					105						110	
Glu	Gln	Thr	Phe	Ser	Val	Thr	Ser	Arg							
		115					120								

<210> 3581

<211> 2132

<212> DNA

<213> Homo sapiens

<400> 3581

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ggcgctgct ggacttgtac tcggcgggcg agcagcgct gtacgaggcg cgggaccgcg  
180  
gccgcctgga gctctcgcc tcggccttcg acgacggcaa cttctcgctg ctcatccgcg  
240  
cgggtggagga gacggacgcg gggctgtaca cctgcaacct gcaccatcac tactgccacc  
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360  
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420  
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480  
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780  
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840  
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1080  
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1140  
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1320  
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1380  
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1440  
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1680  
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1740

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 1920  
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 1980  
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 2132

<210> 3582  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Arg Ala Ser Ser Ala Cys Thr Arg Arg Gly Thr Ala Ala Ala Trp Ser  
 50 55 60  
 Ser Arg Pro Arg Pro Ser Thr Thr Ala Thr Ser Arg Cys Ser Ser Ala  
 65 70 75 80  
 Arg Trp Arg Arg Arg Thr Arg Gly Cys Thr Pro Ala Thr Cys Thr Ile  
 85 90 95  
 Thr Thr Ala Thr Ser Thr Arg Ala Trp Pro Ser Ala Trp Arg Ser Pro  
 100 105 110  
 Thr Ala Pro Arg Pro Pro Pro Thr Gly Thr Ala Arg Arg Arg Cys  
 115 120 125  
 Trp Arg Trp Arg Ala Ala His Pro Arg Phe  
 130 135

<210> 3583  
 <211> 1554  
 <212> DNA  
 <213> Homo sapiens

<400> 3583  
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 gagactctcc ccgagatctt ctaggaggatg acccatctat ttttgtttgg gaagaggaaa  
 120  
 ctccgaaatg ggatcgcgga agacttaaag ggccaggctg attttttttt cctactgcag  
 180  
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<211> 356

<212> PRT

<213> Homo sapiens

<400> 3584

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<212> DNA
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&lt;210&gt; 3586

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3586

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&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

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<212> PRT

<213> Homo sapiens

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&lt;213&gt; Homo sapiens

&lt;400&gt; 3592

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<210> 3594  
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 <212> PRT  
 <213> Homo sapiens

<400> 3594  
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 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

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&lt;210&gt; 3595

&lt;211&gt; 1903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3595

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&lt;210&gt; 3596

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3596

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Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly
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Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr
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325          330          335
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Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg
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385          390          395          400
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Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro
420          425          430
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Asp	Ala	Arg	Phe	Trp	Lys	Gly	Pro	Ser	Glu	Ala	Pro	Ser	Gly	Gln	Ala				
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&lt;210&gt; 3597

&lt;211&gt; 1090

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3597

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&lt;210&gt; 3598

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 <212> PRT  
 <213> Homo sapiens

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 Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg  
 50 55 60  
 Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys  
 65 70 75 80  
 His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala  
 85 90 95  
 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu  
 100 105 110  
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 115 120 125  
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 <212> DNA  
 <213> Homo sapiens

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<213> Homo sapiens

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Met	Val	Glu	Val	Arg	Ser	Trp	Ser	Gly	Ser	Leu	Val	Gly	Trp	Leu	Ala
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Pro	Arg	Pro	Leu	Ser	Val	Pro	Ile	Glu	His	Leu	Leu	Gly	Ala	Lys	Asn
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Cys	Cys	Arg	His	Gly	Gly	Gln	Trp	Val	Arg	Arg	Ala	Val	Pro	Ala	Val
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<210> 3601

<211> 2963

<212> DNA

<213> Homo sapiens

<400> 3601

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<210> 3602

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His
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Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
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Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100							105				110	
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115							120				125	
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
			130							135				140	
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
145					150					155					160
Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
				165						170					175
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
			180							185				190	
Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

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<210> 3603
<211> 1082
<212> DNA
<213> Homo sapiens
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2762

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1080

tt

1082

<210> 3604

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3604

Met	Lys	Met	Val	Lys	Pro	Arg	Glu	Pro	Met	Ile	Phe	Lys	Cys	Val	Phe
1				5					10					15	
Val	Gly	Glu	Met	Ala	Ala	Gln	Val	Gly	Ala	Val	Arg	Val	Val	Arg	Ala
			20					25					30		
Val	Ala	Ala	Gln	Glu	Glu	Pro	Asp	Lys	Glu	Gly	Lys	Glu	Lys	Pro	His
		35					40					45			
Ala	Gly	Val	Ser	Pro	Arg	Gly	Val	Lys	Arg	Gln	Arg	Arg	Ser	Ser	Ser
	50					55				60					
Gly	Gly	Ser	Gln	Glu	Lys	Arg	Gly	Arg	Pro	Ser	Gln	Glu	Pro	Pro	Leu
65					70				75					80	
Ala	Pro	Pro	His	Arg	Arg	Arg	Arg	Ser	Arg	Gln	His	Pro	Gly	Pro	Leu
				85				90					95		
Pro	Pro	Thr	Asn	Ala	Ala	Pro	Thr	Val	Pro	Gly	Pro	Val	Glu	Pro	Leu
			100					105					110		
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Leu	Ala	Pro	Ala	Gly	Pro	Ala
		115					120					125			
Val	Ala	Ala	Pro	Leu	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Ser	Ser	Pro	Ser
	130					135					140				
Arg	Leu														
145															

<210> 3605

<211> 2004

<212> DNA

<213> Homo sapiens

<400> 3605

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120  
cagatgtacc ggaccctgtt cttcaggtac atgtcccaga gcaagcacac ggaggcccgg  
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gagctcatgt actcgggagc cctgctcttc ttcagccatg gccagcaaaa cagtgcagca  
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gacttgcca tgctggtcct ggagtccttg gagaaggcgg aagtggaggt ggctgacgag  
300  
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360  
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420  
cggctgcacc agctgctggc cctcacccctg tggaaagaac aaaactattg tgagtcgagg  
480

tatcattttc tgcactcagc ggacggggag ggctgtgcc aacatgctggg ggagtattcc  
540  
acgtcccgcg gcttccgcag cgaggtggac atgttcgtgg ctcaggccgt gctacagttt  
600  
ctctgttttaaaaacacaaaag tagcgcacgc gtgggtcttca cgacgtacac ccagaagcac  
660  
ccgtccatcg aggacggggc tccgtttgtg gagccgctgc ttaacttcat ctggttcctg  
720  
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780  
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1200  
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1260  
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1320  
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1380  
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1440  
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1560  
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1740  
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1800  
ctactccaaa tgttaccaga acgatgacaa aaggggagac gctctatttt ttcacagtta  
1860  
aatgacagtt gtagattgat acgcagttgt gcatgggaag gggaaacgca cagctttatt  
1920  
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1980  
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2004

&lt;210&gt; 3606

<211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 3606

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Xaa Arg Arg Arg Trp Pro Ser Arg Arg Ala Pro Ala Thr Ala Ala Gln
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Pro Arg Gly Val Gln Arg Val Glu Gly Lys Leu Arg Ala Ser Val Glu
      20           25           30
Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
      35           40           45
Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
      50           55           60
Ser Gly Ala Leu Leu Phe Ser His Gly Gln Gln Asn Ser Ala Ala
      65           70           75           80
Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
      85           90           95
Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
      100          105          110
Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
      115          120          125
Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
      130          135          140
Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
      145          150          155          160
Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
      165          170          175
Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
      180          185          190
Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
      195          200          205
Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
      210          215          220
Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
      225          230          235          240
Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
      245          250          255
Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
      260          265          270
Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
      275          280          285
Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
      290          295          300
Ser Ser Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro
      305          310          315          320
Ile Glu Leu Asp

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<210> 3607  
 <211> 1726  
 <212> DNA  
 <213> Homo sapiens

<400> 3607

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180  
agcgaacccc ttttgaagtt gaggccaaga aaggatcttg tagagaccct cctgcatgaa  
240  
atgatacatg cctatatttatt tgtcactaat aacgacaaag accgagaagg gcatgggtcca  
300  
gaatttttga aacatatgca tcgcatcaac agcctgactg gagccaatat aacgggtatac  
360  
catacttttc acgatgaggt ggatgagtat cggcgacact ggtggcgctg caatgggccg  
420  
tgccagcaca ggccaccgta ttacggctat gtcaaacgag ctactaacag ggaaccctct  
480  
gctcatgact attggtgggc tgagcaccag aaaacctgtg gaggcactta cataaaaatc  
540  
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600  
gtattggccg cagagaataa agataaaccc aacagaggtg aggccagct agtaatccct  
660  
tttagtggga aaggatatgt tctaggagaa acaagcaatt taccttcacc tgggaaactg  
720  
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780  
gctgtaagac ctaattctaa aatcaaggtg aaatttgaac agaatgggtc aagtaaaaat  
840  
tctcatctgg tctccctgc tgtagtaac agtcaccaa atgttctaag caactacttt  
900  
cctagagtat catttgccaa ccaaaaggct ttcagaggtg tgaatggatc tccaaggata  
960  
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1020  
tcactttcta agatatccct aagaaattct tcaaaagtaa cggaatcagc atctgtgatg  
1080  
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1140  
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1200  
gatccaaagt atagtacaac cacagctcag aattccagca gttcatccag tcagagcaaa  
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atgggttaatt gccagtttg tcagaatgaa gttctgggag tctcagatta atgagcactt  
1320  
ggactggtgc cttgaaggtg acagcatcaa agtcaaaagc gaagaaagtc tttgaaaaag  
1380  
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1560  
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1620

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<210> 3608

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3608

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Phe	Val	Gln	Phe	Asn	Asp	Gln	Phe	Phe	Trp	Gly	Gln	Leu	Glu	Ala	Val
		20						25				30			
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85					90						95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100					105					110		
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
	115						120					125			
Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
	130				135						140				
Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
145					150					155				160	
Ala	His	Asp	Tyr	Trp	Trp	Ala	Glu	His	Gln	Lys	Thr	Cys	Gly	Gly	Thr
			165						170					175	
Tyr	Ile	Lys	Ile	Lys	Glu	Pro	Glu	Asn	Tyr	Ser	Lys	Lys	Gly	Lys	Gly
		180					185						190		
Lys	Ala	Lys	Leu	Gly	Lys	Glu	Pro	Val	Leu	Ala	Ala	Glu	Asn	Lys	Asp
	195					200					205				
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210				215						220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225					230					235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245						250					255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
		260						265						270	
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
		275					280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
	290					295					300				
Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
305				310						315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
			325						330					335	
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

340 345 350  
 Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser  
 355 360 365  
 Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val  
 370 375 380  
 Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn  
 385 390 395 400  
 Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser  
 405 410 415  
 Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu  
 420 425 430  
 Gly Val Ser Asp  
 435

&lt;210&gt; 3609

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3609

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 60  
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 120  
 tgcgtcaacc agtgggagca gctgaggggg ccgggtggca acgaggatgg gccacagaag  
 180  
 ctggacttgg aagctgatgc tgagcccaa gacctcgaga gtacgaacct cttggagagt  
 240  
 gaagctccca gggactatatt cctcaagttt gcctatatatt tggatttggga cagcgacaca  
 300  
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 360  
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 420  
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 480  
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 720  
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 780  
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 1080  
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 1140  
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 1200  
 gtagatgctc aataaacact tgctcagggg cccgatctgc aagtgggggtc cgctcaccgg  
 1260  
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 1286

<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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Gly	Gly	Asn	Glu	Asp	Gly	Pro	Gln	Lys	Leu	Asp	Leu	Glu	Ala	Asp	Ala	20	25	30	
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro	35	40	45	
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp	50	55	60	
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu	65	70	75	80
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr	85	90	95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr	100	105	110	
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met	115	120	125	
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly	130	135	140	
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser	145	150	155	160
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro	165	170	175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr	180	185	190	
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser	195	200	205	
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln	210	215	220	
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys	225	230	235	240
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro	245	250	255	
Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg					260	265		

<210> 3611

<211> 816

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3611

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 120  
 caatggagac agttggaaaa cctgtacttc agagaaaaga agttttccgt ggaagttcat  
 180  
 gacccacgca gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac  
 240  
 acgtggtatg catgtccggc attgatcaag tccatctggg ctatggccat aagccaacac  
 300  
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 360  
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 720  
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 816

&lt;210&gt; 3612

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3612

Tyr	Gly	Val	His	Tyr	Tyr	Ala	Val	Lys	Asp	Lys	Gln	Gly	Ile	Pro	Trp
1				5				10						15	
Trp	Leu	Gly	Leu	Ser	Tyr	Lys	Gly	Ile	Phe	Gln	Tyr	Asp	Tyr	His	Asp
			20					25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
			35				40					45			
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
			50			55					60				
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
				85				90						95	
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
			100					105					110		
Ile	His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu

	115					120						125							
Thr	Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly				
	130					135						140							
Lys	Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gln				
145					150					155					160				
Glu	Ser	Asp	Ser	Ser	Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu				
				165					170						175				
Lys	Ser	Arg	Gln	Glu	Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu				
			180					185					190						
Glu	Leu	Lys	Lys	Leu	Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu				
	195					200						205							
Pro	Val	Glu	Tyr	Pro	Leu	Asp	Pro	Gly	Glu	Glu	Pro	Pro	Ile	Val	Arg				
	210					215					220								
Arg	Arg	Ile	Gly	Thr	Ala	Phe	Lys	Leu	Asp	Glu	Gln	Lys	Ile	Leu	Pro				
225					230					235					240				
Lys	Gly	Glu	Glu	Ala	Glu	Leu	Glu	Arg	Leu	Glu	Arg	Glu	Phe	Ala	Ile				
				245				250						255					
Gln	Ser	Gln	Ile	Thr	Glu	Ala	Ala	Arg	Arg	Leu	Ala	Ser	Asp	Pro	Asn				
			260					265					270						

&lt;210&gt; 3613

&lt;211&gt; 659

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3613

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60
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120
cacctggatc cctgcagccc agcctggaat gcgtctggat taggggaaag acgagaaacg
180
aactccagg tgttgacagg ccacacaaag cgggaagata gggcagttgc tcagacacaa
240
tactgtatct agtgcttctg ctctatctt caatcgtggg gttcttttta atgcaaagtg
300
tcacaaggcc aggaattccc atgtgtgctc agttggccca cagcatcatt gtgcctagga
360
aactgcttca atttatcaag tcctctgggc tgggaatctc actgaattcc aaacggcgga
420
aagaggaaac tttcccaacc cgatgtgggt gtgacgcgag ccagggggccc cagggaact
480
gtcccagagc acaccgtccc cctttaacag caactggagc ttggattcgc tcttatattg
540
tacagtcctt tcgaccattg ccctggagca cccgcacacg cgcacgcac tccggccgcg
600
ctcacacaca ctcatacaca cgcacgcaaa cgcggtcgga gaagagcccc cccccccc
659

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&lt;210&gt; 3614

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3614

```

Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
 1           5           10           15
His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
      20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
      35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
      50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
      65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
      85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
      100           105           110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
      115           120

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&lt;210&gt; 3615

&lt;211&gt; 1388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3615

```

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60
agccggtacc ggcaaccacg ggcagctctc aggggaatctc cgtcgtgagg ccagaggctc
120
cagtccccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
180
gcagaggggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
240
agcggcagcc agacagagtc agaagaggag agctccgaga tggatgatga ggactatgag
300
cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcgagagcta
360
aaggagaagt tgttcagga acgactgagt cagctgcggt tgcggctgga ggaagtgggg
420
gctgagagag cccctgaata cacggagccc cttggggggc tgcagcggag cctcaagatt
480
cgattcagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
540
gaatgtgagc tgcagggagc caaacagcac ctggagagtg agaagctgct gctctatgac
600
acgctgcagg gggagctgca ggagcggatc cagaggctgg aggaggaccg ccagagcctg
660
gacctcagct ctgaatggtg ggacgacaaa ctgcacgcca gaggcagctc caggtcttgg
720
gactccctgc cgcccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
780
tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
840
gctgtgtccc ctcagaagag aaaatcggat gacaggcgga cccacaggcc ctcagggtc
900

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tgcccagcca ggctcctgtg gtgctgctgg gccctccac tccatctggc actggcctgg  
 960  
 actcctctc tgccctctc gaggcctgca cagctgtggc cgtggagctg acctgaccag  
 1020  
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 1080  
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 1200  
 agtcagacgt gattatctgg gggctctgtcc accctggctg gatctggagg caagatgcca  
 1260  
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 1380  
 aaaaaaaaa  
 1388

<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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Gly	Asp	Ser	Ala	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Glu	Ser	Glu	Glu
			20					25					30		
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu	Met
		35					40					45			
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu	Met
	50					55					60				
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe	Arg
65					70					75				80	
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala	Glu
				85					90					95	
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser	Leu
			100					105					110		
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu	Asp
		115					120					125			
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln	His
	130					135					140				
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu	Leu	
145				150					155					160	
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp	Leu
			165						170					175	
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser	Arg
			180				185						190		
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu	Val
		195					200					205			
Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu	Glu
	210					215					220				
Asp	Trp	Thr	Ala	Ile	Lys	Lys	Ala	Arg	Ala	Ala	Val	Ser	Pro	Gln	Lys

```

<400> 3618
Gly Pro Trp Ala Leu Gly Gln Val Val Asn Tyr Ser Asp Ser Arg Thr
 1             5             10             15
Ala Glu Glu Ile Cys Glu Ser Ser Ser Lys Met Ile Thr Phe Ile Asp

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	20		25		30										
Leu	Ala	Gly	His	His	Lys	Tyr	Leu	His	Thr	Thr	Ile	Phe	Gly	Leu	Thr
	35						40					45			
Ser	Tyr	Cys	Pro	Asp	Cys	Ala	Leu	Leu	Leu	Val	Ser	Ala	Asn	Thr	Gly
	50					55					60				
Ile	Ala	Gly	Thr	Thr	Arg	Glu	His	Leu	Gly	Leu	Ala	Leu	Ala	Leu	Lys
65					70					75				80	
Val	Pro	Phe	Phe	Ile	Val	Val	Ser	Lys	Ile	Asp	Leu	Cys	Ala	Lys	Thr
				85					90					95	
Thr	Val	Glu	Arg	Thr	Val	Arg	Gln	Leu	Glu	Arg	Val	Leu	Lys	Gln	Pro
			100				105					110			
Gly	Cys	His	Lys	Val	Pro	Met	Leu	Val	Thr	Ser	Glu	Asp	Asp	Ala	Val
	115					120					125				
Thr	Ala	Ala	Gln	Gln	Phe	Ala	Gln	Ser	Pro	Asn	Val	Thr	Pro	Ile	Phe
	130					135					140				
Thr	Leu	Ser	Ser												
145															

&lt;210&gt; 3619

&lt;211&gt; 948

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3619

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60
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120
aggtgtctct tcttgagaag aactgtccat accatgggtg tggttaaggct ttcaccagtt
180
ctcaggatgc ccatagggat ggggtgaagcc tgcttggcct gtggtgcttt ccagtggccg
240
tcctctcatt agggcccccac agtggcatta ggatgcacct ctcggcggtg ttcaacgccc
300
tcctggtgtc ggtgtgtggc gcggtcctgt ggaagcatgt gcggctgcgt gagcatgcag
360
ccacactgga ggaggagctg gccctcagcc gacaggccac agagccagcc ccagcactga
420
ggatcgacta cccgaaggca ctgcagatcc tgatggaggg cggcacacac atggtgtgca
480
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540
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600
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660
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720
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780
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840
ggctcttctt catggagggc tggggcgagg gtgcacactt cgacctctac aagctgctca
900

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gccccaaagca gcctctcctg cgggcacagc tgaagaccct gggccggc  
948

<210> 3620

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

Trp	Arg	Ala	Ala	His	Thr	Trp	Cys	Ala	Arg	Ala	Ala	Arg	Thr	Gln	Thr
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Ala	Ser	Ala	Ala	Ser	Ser	Gly	Ser	Ala	Thr	Pro	Thr	Arg	Leu	Arg	Ser
			20					25					30		
Ser	Ser	Ser	Ser	Met	Ala	Thr	Pro	Leu	Ser	Cys	Cys	Pro	Thr	Trp	Ala
			35				40					45			
Pro	Gly	Ala	Ser	Ser	Gln	Pro	Cys	Ser	Thr	Tyr	Pro	Pro	Trp	Arg	Thr
			50			55					60				
Thr	Thr	Leu	Ser	Thr	Ser	Thr	Ser	Trp	Ser	Cys	Leu	Leu	Leu	Pro	Cys
65					70					75				80	
Ala	Ser	Cys	Pro	Ser	Arg	Cys	Ser	Cys	Gln	Thr	Trp	Pro	Ser	Ser	Pro
				85					90					95	
Thr	Ala	Ser	Thr	Pro	Thr	Thr	Ser	Cys	Thr	Ser	Phe	Met	Thr	Thr	Cys
			100					105					110		
Cys	His	Ser	Ser	Thr	Pro	Cys	Gly	Ser	Phe	Pro	Ala	Trp	Pro	Thr	Arg
			115				120					125			
His	Gly	Ser	Ser	Ser	Trp	Arg	Ala	Gly	Ala	Arg	Val	His	Thr	Ser	Thr
			130			135					140				
Ser	Thr	Ser	Cys	Ser	Ala	Pro	Ser	Ser	Leu	Ser	Cys	Gly	His	Ser	
145					150					155					

<210> 3621

<211> 2934

<212> DNA

<213> Homo sapiens

<400> 3621

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120  
ggttaaaagg aaggatttgc acaccttcca cttagggctc gggtaatccc aaacttcctc  
180  
ccttaattgg gcttgcagtg ctaaaaagca gatcggttctc tctgaggttt tcccaacagt  
240  
acctcaagaa aataacatct gttttttgta acgttccaca gtattcggaa ttggctacag  
300  
aacataataa gatccttgcc agcacattac agaataatttt tgttgaacct tcttgagaat  
360  
tcagagaaac tgctgagtga ccactgaacg aaaagatcta atcttaaggc ttacgcgtgt  
420  
tccatccacc acatcagaac aatgtcgtat gtttttgtaa atgattcttc tcagactaac  
480  
gtgcccttgc tgcaagcctg tattgatggg gactttaatt attccaagcg gcttttggaa  
540

agtggctttg acccaaatat tcgtgacagc aggggcagaa caggccttca ccttgcagca  
600  
gctcgaggga atgtagacat ctgccagtta ctgcataaat tcggtgccga tcttctggcc  
660  
acagattatc aaggaaacac agctcttcac ctctgtggcc atgtggatac tatccaattt  
720  
ttggtttcca atggactcaa aattgatatt tgcaatcatc aagggtgtac ccctttagtt  
780  
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960  
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2040  
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2100  
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2160

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 2280  
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<210> 3622

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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			20					25				30			
Glu	Ser	Gly	Phe	Asp	Pro	Asn	Ile	Arg	Asp	Ser	Arg	Gly	Arg	Thr	Gly
		35					40					45			
Leu	His	Leu	Ala	Ala	Ala	Arg	Gly	Asn	Val	Asp	Ile	Cys	Gln	Leu	Leu
		50				55				60					
His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
65				70					75					80	
Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
			85					90					95		
Asn	Gly	Leu	Lys	Ile	Asp	Ile	Cys	Asn	His	Gln	Gly	Ala	Thr	Pro	Leu
		100					105					110			
Val	Leu	Ala	Lys	Arg	Arg	Gly	Val	Asn	Lys	Asp	Val	Ile	Arg	Leu	Leu
		115				120					125				
Glu	Ser	Leu	Glu	Glu	Gln	Glu	Val	Lys	Gly	Phe	Asn	Arg	Gly	Thr	His
		130				135				140					
Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
145				150						155				160	
Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu

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                165                170                175
Ser Ser Phe Arg Thr Thr Trp Gln Glu Phe Val Glu Asp Leu Gly Phe
                180                185                190
Trp Arg Val Leu Leu Leu Ile Phe Val Ile Ala Leu Leu Ser Leu Gly
                195                200                205
Ile Ala Tyr Tyr Val Ser Gly Val Leu Pro Phe Val Glu Asn Gln Pro
                210                215                220
Glu Leu Val His
225

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&lt;210&gt; 3623

&lt;211&gt; 586

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3623

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120
ggcagcaaaa tgtgggcaca gcgccatgtc tgggttctgc agctgtttga tgatcctctt
180
gcggaatttc tccctcacac gattaaattc cattatgtcc atggggtcct cttcgatcca
240
aaacttatga aattcatgca tcaaatagca gaatgtttgc tgaaagtgag acaatgttgg
300
agcttctggg gcgatattgt agaaatgggt ttttagagct ccgctgacca gtagattata
360
tgccagggtca gttatattga tgcccacaat tgcaaatgag tacccaattg ctttatccat
420
ccttttcttc tccattctg ctttgcgtgaa tttgcttatt tcttctttag tgatatccct
480
gcatttcgga tgaagagagt cagacaggac ctgctgagct gctgtggcat ccctttccgc
540
gaaatactgc aaattgtaca gtcccagaag tccattcct cgaaag
586

```

&lt;210&gt; 3624

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3624

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Met Gly Leu Leu Gly Leu Tyr Asn Leu Gln Tyr Phe Ala Glu Arg Asp
  1             5             10             15
Ala Thr Ala Ala Gln Gln Val Leu Ser Asp Ser Leu His Pro Lys Cys
            20             25             30
Arg Asp Ile Thr Lys Glu Glu Ile Ser Lys Phe Ser Lys Ala Glu Trp
            35             40             45
Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val
            50             55             60
Gly Ile Asn Ile Thr Asp Leu Ala Tyr Asn Leu Leu Val Ser Gly Ala
            65             70             75             80
Leu Lys Thr His Phe Tyr Asn Ile Ala Pro Glu Ala Pro Thr Leu Ser

```

				85						90					95				
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				100															
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&lt;210&gt; 3625

&lt;211&gt; 4799

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3625

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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&lt;210&gt; 3627

&lt;211&gt; 1760

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3627

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&lt;210&gt; 3628

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

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 660  
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 780  
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<210> 3632  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 3632  
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 Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

20 25 30  
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 35 40 45  
 Arg Glu Tyr His Lys Trp Arg Thr Tyr Phe Lys Lys Arg Leu Gln Gln  
 50 55 60  
 His Lys Asp Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu  
 65 70 75 80  
 Tyr Trp His Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu  
 85 90 95  
 Glu Asp Pro Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp  
 100 105 110  
 Thr Leu Phe Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn  
 115 120 125  
 Pro Arg Glu Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly  
 130 135 140  
 Leu Ile Pro Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro  
 145 150 155 160  
 Phe Gln Asp Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu  
 165 170 175  
 Pro Ala Ser Ala Ser Ala Pro Val Pro Asp Pro Asn Asn Pro Pro Ala  
 180 185 190  
 Gln Glu Ser Ile Leu Pro Thr Thr Ala Leu Pro Thr Val Ser Leu Pro  
 195 200 205  
 Asp Ser Leu Ile Ala Pro Pro Thr Ala Pro Ser Leu Ala Arg  
 210 215 220

&lt;210&gt; 3633

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3633

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 180  
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 300  
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 360  
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 420  
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 480  
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 660

aacatgaagc agccgttggc agatacgct gtgcaggggtg gggatatggag aatcaagtgg  
 720  
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 780  
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 840  
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 1380  
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 1570

&lt;210&gt; 3634

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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		20					25					30			
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
	35					40					45				
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50				55				60						
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65				70				75						80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
		85				90							95		
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
		100					105						110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

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      115      120      125
His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg
      130      135      140
Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val
      145      150      155      160
Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala
      165      170      175
Pro Ser Trp Ser Phe Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu
      180      185      190
Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp
      195      200      205
Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu
      210      215      220
Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala
      225      230      235      240
Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe
      245      250      255
Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp
      260      265      270
Glu Trp Glu Gly Asn
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<210> 3635  
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 <212> DNA  
 <213> Homo sapiens

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120
gttttactta aagatgaacc ccagcagact gctgctcaga tgggttgtgc gccaatccag
180
cctctggcga tgcctcaagc tttgcctctg gcggcagggtc ccttgccctcc aggggtccatc
240
gcaaactctta cagaactgca aggagtgata gttggacagc cagtactggg ccaagcacag
300
ttggcagggc tggggcaagg aattctgaca gaaacacaac aagggttaat ggtagccagc
360
cctgctcaga ccctcaatga cacgctggat gacatcatgg cagcagtcag tggaagagca
420
tctgcaatgt caaactctcc taccacagct attgctgcat ccatttccca acctcagact
480
ccaactccaa gtctatcat ctctccttca gccatgcttc ctatctaccc tgccattgat
540
attgatgcac agactgagag taatcatgac acggcgctaa cacttgcttg tgctgggtggc
600
cacgaggaac tgggtacaaac actgctagag agaggagcta gtatagagca ccgagacaag
660
aaagggttta ctccactcat cttggctgcc acagctgggtc atgttggtgt tgtggaaata
720
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780

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835

<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

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			20					25				30		
Ala	Arg	Leu	Gln	Gln	Val	Asp	Pro	Val	Leu	Leu	Lys	Asp	Glu	Pro
			35				40					45		
Gln	Thr	Ala	Ala	Gln	Met	Gly	Cys	Ala	Pro	Ile	Gln	Pro	Leu	Ala
	50					55					60			Met
Pro	Gln	Ala	Leu	Pro	Leu	Ala	Ala	Gly	Pro	Leu	Pro	Pro	Gly	Ser
65					70					75				80
Ala	Asn	Leu	Thr	Glu	Leu	Gln	Gly	Val	Ile	Val	Gly	Gln	Pro	Val
				85					90					95
Gly	Gln	Ala	Gln	Leu	Ala	Gly	Leu	Gly	Gln	Gly	Ile	Leu	Thr	Glu
			100					105					110	Thr
Gln	Gln	Gly	Leu	Met	Val	Ala	Ser	Pro	Ala	Gln	Thr	Leu	Asn	Asp
		115					120					125		Thr
Leu	Asp	Asp	Ile	Met	Ala	Ala	Val	Ser	Gly	Arg	Ala	Ser	Ala	Met
130						135					140			Ser
Asn	Thr	Pro	Thr	His	Ser	Ile	Ala	Ala	Ser	Ile	Ser	Gln	Pro	Gln
145					150					155				160
Pro	Thr	Pro	Ser	Pro	Ile	Ile	Ser	Pro	Ser	Ala	Met	Leu	Pro	Ile
				165					170					175
Pro	Ala	Ile	Asp	Ile	Asp	Ala	Gln	Thr	Glu	Ser	Asn	His	Asp	Thr
			180					185					190	Ala
Leu	Thr	Leu	Ala	Cys	Ala	Gly	Gly	His	Glu	Glu	Leu	Val	Gln	Thr
		195					200					205		Leu
Leu	Glu	Arg	Gly	Ala	Ser	Ile	Glu	His	Arg	Asp	Lys	Lys	Gly	Phe
210					215					220				Thr
Pro	Leu	Ile	Leu	Ala	Ala	Thr	Ala	Gly	His	Val	Gly	Val	Val	Glu
225					230					235				Ile
Leu	Leu	Asp	Asn	Gly	Ala	Asp	Ile	Glu	Ala	Gln	Ser	Glu	Arg	Thr
				245					250					Lys
Asp	Thr	Pro	Leu	Ser	Leu	Ala	Cys	Ser	Gly	Gly	Arg	Gln	Glu	Val
			260					265					270	Val
Glu	Leu	Leu	Leu	Ala	Arg									
			275											

<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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120  
cctgccaaacc cctgctcttc caggctcggg cccgggggttc tgcggctggt agggacagag  
180  
gcaaagaagg gcaggacggt ccggtttccc gtggatgttc ccgcccgaga aagacagcaa  
240  
gttgtgtgtg cgcccgggac gcgggaggga aggtagccgc cgcccgccag ccatggacca  
300  
tcattctttag tgcagaggat ggaaagtga tgcccagtaa gactgaagat ccattctgca  
360  
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420  
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480  
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660  
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720  
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780  
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900  
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1020  
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1080  
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1140  
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1260  
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1320  
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1380  
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1440  
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1680

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 1920  
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 1980  
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 2040  
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 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 3638  
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 Phe Leu Cys Ala Ala Thr Ser Cys Val Gly Phe Phe Met Pro Tyr Trp  
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 Leu Trp Gly Ser Gln Leu Gly Lys Pro Val Ser Phe Gly Thr Phe Arg  
 35 40 45  
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met  
 50 55 60  
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala  
 65 70 75 80  
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu  
 85 90 95  
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu  
 100 105 110  
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly  
 115 120 125  
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp  
 130 135 140  
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp  
 145 150 155 160  
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly  
 165 170 175  
 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly  
 180 185 190  
 Lys Lys Gln Lys His Tyr Pro Tyr  
 195 200

<210> 3639  
 <211> 726  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3639

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 120  
 aagactaaca gtggttatct ctcagcggga ttataaatgt tttggttttt tttttttttt  
 180  
 tgtacatttt agtatttttt gaaatttttt taataagcgt gtattacata cagtaaacaa  
 240  
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt  
 300  
 ttttatcaat ggtgaacatt gcaaattgatt gatacgtttt tcttaggaag tggcattgcc  
 360  
 acaaattggtt tttccaacac cagcagggcc tgagagtgtc atcaccatac actcttgccg  
 420  
 gcaataaaaa aatttcacct tttaattgat ttaaaaggga aaagttgggg tgttgggttc  
 480  
 tccagggcat ttctttcatt atgagtgaca tttttctgaa aggaacgtga tctcgttttc  
 540  
 tagccgcattg aagcatttct ccaacaagac ccactgtacc agtcctggga tctccacacc  
 600  
 tgtgccttct ccctgctctt tctaggtcct gattctcacc tctgctgtg taataaccct  
 660  
 gtcattttct ccttatccca gtcccatgtc tgtgacaagc ttggaggccg agttgcaagc  
 720  
 taagat  
 726

&lt;210&gt; 3640

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70					75				80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
			100												

&lt;210&gt; 3641

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 120  
 agtccccgag cagtcacgcg agccgggacc ttgccccgct ggaacgcaga agcggccgtg  
 180  
 gagctcgaga cgctcgcgcg ctacacctct gggccccctgt gcgtggggaa gtcaggaaga  
 240  
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 300  
 ggaggtggcc gaagggaaga ggggtggggca ggggctgctc tgcaccctct agcagagcgg  
 360  
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 420  
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 455

<210> 3642  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3642  
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 20 25 30  
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 35 40 45  
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu  
 50 55 60  
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser  
 65 70 75 80  
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala  
 85 90 95  
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro  
 100 105 110  
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser  
 115 120 125  
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala  
 130 135 140  
 Phe Lys Thr Arg  
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<210> 3643  
 <211> 2243  
 <212> DNA  
 <213> Homo sapiens

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240  
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360  
gacaagttca tcaagcaaag ggactaccac cagcagttcc ggcatgttca gaacaacctg  
420  
atgagaaatt ctacaacaga aaaaatcgaa ccaagagaac tggaccccat cctgactgag  
480  
gtcaccctga tgaatgcccc cagtgcagta tacttacgct tcctcaagaa gaggattagc  
540  
tctgattttg aggtgggaga ctccatggcc tcagaggaag taaagcaaga gcaccagaag  
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780  
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840  
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900  
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1620  
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1680

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 1920  
 catgctctgc cctcagacct ggccaggtga tgctctgggg gcagcatctc ccacccgaga  
 1980  
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 2040  
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 2100  
 agtcctagac aacttgggta catctgggga cctagcagtt aggcttgact ttgaggagag  
 2160  
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 2220  
 aaaaaaaaaa aaaaaaaaaa aaa  
 2243

<210> 3644  
 <211> 560  
 <212> PRT  
 <213> Homo sapiens

<400> 3644  
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 Gln Val Ala Ser Lys Ala Glu Glu Asn Leu Leu Met Val Leu Gly Thr  
 20 25 30  
 Asp Met Ser Asp Arg Arg Ala Ala Val Ile Phe Ala Asp Thr Leu Thr  
 35 40 45  
 Leu Leu Phe Glu Gly Ile Ala Arg Ile Val Glu Thr His Gln Pro Ile  
 50 55 60  
 Val Glu Thr Tyr Tyr Gly Pro Gly Arg Leu Tyr Thr Leu Ile Lys Tyr  
 65 70 75 80  
 Leu Gln Val Glu Cys Asp Arg Gln Val Glu Lys Val Val Asp Lys Phe  
 85 90 95  
 Ile Lys Gln Arg Asp Tyr His Gln Gln Phe Arg His Val Gln Asn Asn  
 100 105 110  
 Leu Met Arg Asn Ser Thr Thr Glu Lys Ile Glu Pro Arg Glu Leu Asp  
 115 120 125  
 Pro Ile Leu Thr Glu Val Thr Leu Met Asn Ala Arg Ser Glu Leu Tyr  
 130 135 140  
 Leu Arg Phe Leu Lys Lys Arg Ile Ser Ser Asp Phe Glu Val Gly Asp  
 145 150 155 160  
 Ser Met Ala Ser Glu Glu Val Lys Gln Glu His Gln Lys Cys Leu Asp  
 165 170 175  
 Lys Leu Leu Asn Asn Cys Leu Leu Ser Cys Thr Met Gln Glu Leu Ile  
 180 185 190  
 Gly Leu Tyr Val Thr Met Glu Glu Tyr Phe Met Arg Glu Thr Val Asn  
 195 200 205  
 Lys Ala Val Ala Leu Asp Thr Tyr Glu Lys Gly Gln Leu Thr Ser Ser

```

      210              215              220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala
225              230              235              240
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala
      245              250              255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu
      260              265              270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val
      275              280              285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe
      290              295              300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu
305              310              315              320
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu
      325              330              335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile
      340              345              350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu
      355              360              365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr
      370              375              380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn
385              390              395              400
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp
      405              410              415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu
      420              425              430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp
      435              440              445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys
      450              455              460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp
465              470              475              480
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp
      485              490              495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu
      500              505              510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser
      515              520              525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu
      530              535              540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu
545              550              555              560

```

&lt;210&gt; 3645

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3645

acgcgtacat gggcaggtgg tagcggttat agtcaggtg gtcaagagtg cttctctcca  
60

ccagggtttt gtagatggat tcctcaaaaa ctcttttgag gtattgctg ggcttctcag  
120

tcgggttgat ttcctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt  
 180  
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt  
 240  
 ggaacagggc caggcaccac ggctcgggta agtagctata gagatctgtg atcaggtttt  
 300  
 catcgtaccg agcacacagg ttgttgagga gttgctcgtg ctggccaaac aagcggatgt  
 360  
 agttggaggc ggggaagggc tccctagaaa ggcacgtgat ggtttccacc attttatact  
 420  
 tgtaatatg aattcggaag taagtcccat ttttcgcact gccggttact agttctaaac  
 480  
 cataattagg ctggggccatt tgtacctcca agggagttgg aatggcaggc ttggcaatat  
 540  
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg  
 600  
 ggatgagccg gtcaagatta gctggtggct cggtcacagg ctcaagggtt ggatcaaaga  
 660  
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctggtgg  
 720  
 gccattcat ttgagtagta tctattggag aatttgggtga gggagccagc agctctgatg  
 780  
 gctatgtcgt tgggtgtggaa gttggtatca atcacaagtc gac  
 823

&lt;210&gt; 3646

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
1				5				10						15	
Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
		20						25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
		35					40					45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70					75					80
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
				85					90					95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105						110	
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120						125		
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
		130				135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155					160
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
				165					170					175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

```

                180                185                190
Ala His Gln Ile Glu Asp Glu Glu Ile Asn Pro Thr Glu Lys Pro Arg
                195                200                205
Gln Tyr Leu Lys Arg Val Phe Glu Glu Ser Ile Tyr Lys Thr Leu Val
                210                215                220
Glu Arg Ser Thr Leu Asp Tyr Leu His Tyr Asn Arg Tyr His Leu Pro
225                230                235                240
Met Tyr Ala

```

&lt;210&gt; 3647

&lt;211&gt; 584

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3647

```

acgcgtcggg cgagcgccgc gcctacgggc ccttttttct gcgcgaccgc gtggctgtgg
60
gcgcggatgc ctttgagcgc ggtgacttct cactgcgtat cgagccgctg gaggtcggcg
120
acgagggcac ctactcctgc cacctgcacc accattactg tggcctgcac gaacgccgcg
180
tcttcacact gacggtcgcc gaacccacg cggagccgcc ccccgggggc tctccgggca
240
acggctccag ccacagcggc gcccagggc caggtgaagg aggcctccct gggacccggg
300
aaggcgggag cccacccac cgggggttgc tctgcgccg ctgtcccttg cccgaggccc
360
gcgcatccca gcgggnnggc cgtggcccgc gtcggggcgc aggtcttgct ggtacctgac
420
gccgtccga ccccggttc cccgcagacc ccacactggc gcgcggccac aacgtcatca
480
atgtcatcgt ccccgagagc cgagcccact tcttcagca gctgggctac gtgctggcca
540
cgctgctgct cttcatcctg ctactggtca ctgtcctcct ggcc
584

```

&lt;210&gt; 3648

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3648

```

Thr Arg Arg Ala Ser Ala Ala Pro Thr Gly Pro Phe Phe Cys Ala Thr
1                5                10                15
Ala Trp Leu Trp Ala Arg Met Pro Leu Ser Ala Val Thr Ser His Cys
20                25                30
Val Ser Ser Arg Trp Arg Ser Pro Thr Arg Ala Pro Thr Pro Ala Thr
35                40                45
Cys Thr Thr Ile Thr Val Ala Cys Thr Asn Ala Ala Ser Ser Thr
50                55                60

```

&lt;210&gt; 3649

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3649

```

naaaaataat gcagacataa aatgaaaaaa gattgaagat tgttacagag aaataggtga
60
ggaagcatga tactgaaggc ttgtcactcc tgttttcact tccacacaga caagcatatt
120
tgctcattgt ttgctgtgct cccctttttt tttcagggtg ctatttctgc agatgtcaaa
180
gaagttctgt taactgatgg gaatgaaaag gccatcagaa atgtgcaaga catcatcaca
240
aggaatcaga aggctggtgt gtttaagacc cagaaaatat caagctgcgt tttacgatgg
300
gataatgaga cagatgtctc tcaactggaa ggacattttg acattgttat gtgtgctgac
360
tgctgttttc tggaccagta cagagccagc cttgttgatg caataaagag attactccag
420
cccaggggga aagcgatggt atttgcccca cgccgagggg atactttaaa ccagttttgc
480
aatctagctg aaaaagctgg tttctgtatc caaagacatg aaaattatga tgaacacatt
540
tcaaacttcc actccaagtt gaaaaaggaa aaccgggaca tatatgaaga aaaccttcat
600
taccgcctc tgcttatttt gaccaaacat ggatagaaga ttaagctt
648

```

&lt;210&gt; 3650

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3650

```

Met Ile Leu Lys Ala Cys His Ser Cys Phe His Phe His Thr Asp Lys
1           5           10           15
His Ile Cys Ser Leu Phe Ala Val Leu Pro Phe Phe Phe Gln Val Ala
20           25           30
Ile Ser Ala Asp Val Lys Glu Val Leu Leu Thr Asp Gly Asn Glu Lys
35           40           45
Ala Ile Arg Asn Val Gln Asp Ile Ile Thr Arg Asn Gln Lys Ala Gly
50           55           60
Val Phe Lys Thr Gln Lys Ile Ser Ser Cys Val Leu Arg Trp Asp Asn
65           70           75           80
Glu Thr Asp Val Ser Gln Leu Glu Gly His Phe Asp Ile Val Met Cys
85           90           95
Ala Asp Cys Leu Phe Leu Asp Gln Tyr Arg Ala Ser Leu Val Asp Ala
100          105          110
Ile Lys Arg Leu Leu Gln Pro Arg Gly Lys Ala Met Val Phe Ala Pro
115          120          125
Arg Arg Gly Asn Thr Leu Asn Gln Phe Cys Asn Leu Ala Glu Lys Ala
130          135          140
Gly Phe Cys Ile Gln Arg His Glu Asn Tyr Asp Glu His Ile Ser Asn
145          150          155          160
Phe His Ser Lys Leu Lys Lys Glu Asn Pro Asp Ile Tyr Glu Glu Asn

```

165  
 Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly  
 180 185

175

&lt;210&gt; 3651

&lt;211&gt; 2469

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3651

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 60  
 cccaccactg gccccatggc tgccgtgcag atggatcctg agctagccaa gcgcctcttc  
 120  
 tttgaagggg ccactgtggt catcctgaac atgcccaagg gaacagagtt tgggattgac  
 180  
 tataactcct gggaggtcgg gcccaagttc cggggcggtga agatgatccc tccaggcatc  
 240  
 cacttctctc actacagctc tgtggacaag gctaataccga aggaagtagg ccctcgtagt  
 300  
 ggtttcttcc ttagcctgca ccagcggggg ctgacagtgc tgcgctggag cacactcagg  
 360  
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 420  
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 480  
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 540  
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 600  
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 720  
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 900  
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 960  
 atcaacctca tgtccatcct gtaccaccag cttggtgaga tccccgctga cttcttcgta  
 1020  
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 1080  
 tgcagcattg ccgtggatgc caccctgaga aagaaagctg aaaagttcca agctcacctg  
 1140  
 accaagaagt tccggtggga ctttgctgcg gaacctgagg actgtgcccc ggtgggtggtg  
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 1320

cagggcagca atctctccag gtccctgcaaa gatggagcca gaattccctt tttcactgat  
 1380  
 aaatatattt cttcattgcc aaagaggctg taccatcctt gaaggcacat ttgtgggttc  
 1440  
 cccatcagcc aggccttggt gctaacctgg ctgaatttca cacaggctct tacacacaca  
 1500  
 cgctcctagg agacatctgc ctacacggca accatatttc ctctgaatga gaaggaattg  
 1560  
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 1620  
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 ttcaatctag caggtggtca gcttcagctt tctccatcga aatcccatc tctgtccag  
 1860  
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 1920  
 gctgtcacct cccacctgtt ccattccgag gcctcaccca gaagtgggac cctcccttc  
 1980  
 ctcaccagag ccaccgtgac tgtttctgat gacctggaga gtcaacaaca accagaaagg  
 2040  
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 2100  
 agaagacctg gtcagcctaa atcttcccag tcccgctgtg gagctgtcag tcaccggagt  
 2160  
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 2220  
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 2280  
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 2400  
 gtcttcgagt tgagacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 2460  
 aaaaaaaaaa  
 2469

&lt;210&gt; 3652

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3652

Met	Ala	Ala	Val	Gln	Met	Asp	Pro	Glu	Leu	Ala	Lys	Arg	Leu	Phe	Phe
1				5				10					15		
Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
			20					25					30		
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
		35					40					45			
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

50		55		60
Lys Ala Asn Pro Lys	Glu Val Gly Pro Arg Met	Gly Phe Phe Leu Ser		
65	70	75	80	
Leu His Gln Arg Gly	Leu Thr Val Leu Arg Trp	Ser Thr Leu Arg Glu		
	85	90	95	
Glu Val Asp Leu Ser	Pro Ala Pro Glu Ser Glu	Val Glu Ala Met Arg		
	100	105	110	
Ala Asn Leu Gln Glu	Leu Asp Gln Phe Leu Gly	Pro Tyr Pro Tyr Ala		
	115	120	125	
Thr Leu Lys Lys Trp	Ile Ser Leu Thr Asn Phe	Ile Ser Glu Ala Thr		
	130	135	140	
Val Glu Lys Leu Gln	Pro Glu Asn Arg Gln Ile	Cys Ala Phe Ser Asp		
145	150	155	160	
Val Leu Pro Val Leu	Ser Met Lys His Thr Lys	Asp Arg Val Gly Gln		
	165	170	175	
Asn Leu Pro Arg Cys	Gly Ile Glu Cys Lys Ser	Tyr Gln Glu Gly Leu		
	180	185	190	
Ala Arg Leu Pro Glu	Met Lys Pro Arg Ala Gly	Thr Glu Ile Arg Phe		
	195	200	205	
Ser Glu Leu Pro Thr	Gln Met Phe Pro Glu Gly	Ala Thr Pro Ala Glu		
	210	215	220	
Ile Thr Lys His Ser	Met Asp Leu Ser Tyr Ala	Leu Glu Thr Val Leu		
225	230	235	240	
Ile Lys Gln Phe Pro	Ser Ser Pro Gln Asp Val	Leu Gly Glu Leu Gln		
	245	250	255	
Phe Ala Phe Val Cys	Phe Leu Leu Gly Asn Val	Tyr Glu Ala Phe Glu		
	260	265	270	
His Trp Lys Arg Leu	Leu His Leu Leu Cys Arg	Ser Glu Ala Ala Met		
	275	280	285	
Met Lys His His Thr	Leu Tyr Ile Asn Leu Met	Ser Ile Leu Tyr His		
	290	295	300	
Gln Leu Gly Glu Ile	Pro Ala Asp Phe Phe Val	Asp Ile Val Ser Gln		
305	310	315	320	
Asp Asn Phe Leu Thr	Ser Thr Leu Gln Val Phe	Phe Ser Ser Ala Cys		
	325	330	335	
Ser Ile Ala Val Asp	Ala Thr Leu Arg Lys Lys	Ala Glu Lys Phe Gln		
	340	345	350	
Ala His Leu Thr Lys	Lys Phe Arg Trp Asp Phe	Ala Ala Glu Pro Glu		
	355	360	365	
Asp Cys Ala Pro Val	Val Val Glu Leu Pro Glu	Gly Ile Glu Met Gly		
370	375	380		

&lt;210&gt; 3653

&lt;211&gt; 283

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3653

ncaaagagca aggggtggatg ccccaggcca gcccaggagc ttggcgccac tggaggaagt  
60

gcattataacc aatcagagct tctttttgctg ctgctgaaat ggaacggtgc catcaggccg  
120

tcttctccac tggagatgct ccttcagctc agcaggacgc tagctcgga ctcagactgc  
180

acattttttgc ggattgggag gagggccgac gccgtggccg gatagtctct ggagctgcct  
 240  
 tttgggggtg tttgctgtt ggcattttca gtactccacg cgt  
 283

<210> 3654  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 3654  
 Met Pro Gln Ala Ser Pro Gly Ala Trp Arg His Trp Arg Lys Cys Ile  
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 Ile Pro Ile Arg Ala Ser Phe Ala Ala Glu Met Glu Arg Cys His  
 20 25 30  
 Gln Ala Val Phe Ser Thr Gly Asp Ala Pro Ser Ala Gln Gln Asp Ala  
 35 40 45  
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg  
 50 55 60  
 Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro  
 65 70 75 80  
 Val Gly Ile Phe Ser Thr Pro Arg  
 85

<210> 3655  
 <211> 3477  
 <212> DNA  
 <213> Homo sapiens

<400> 3655  
 nttttttttt tttttttttt tttttttttt tttttttttt ttttgcactg attcagactt  
 60  
 taatggaggt gctcatttca atgccacaga ggtggtggca actgtggaac gtggcatggg  
 120  
 gagtgaagagg ttgctctggt gcagctggag gaagaacagg gaacctaggg ttggggagag  
 180  
 atgtatagag gaaaactccc ccaggcacac agcctccgct ctggaccaac gcaggcttca  
 240  
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&lt;210&gt; 3656

&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3656

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			20					25				30			
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40				45				
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50				55					60					
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

65					70					75				80	
Glu	Gln	Glu	Lys	Ile	Asp	Lys	Leu	Met	Ile	Glu	Met	Asp	Gly	Thr	Glu
				85					90					95	
Asn	Lys	Ser	Lys	Phe	Gly	Ala	Asn	Ala	Ile	Leu	Gly	Val	Ser	Leu	Ala
			100					105					110		
Val	Cys	Lys	Ala	Gly	Ala	Val	Glu	Lys	Gly	Val	Pro	Leu	Tyr	Arg	His
		115					120					125			
Ile	Ala	Asp	Leu	Ala	Gly	Asn	Ser	Glu	Val	Ile	Leu	Pro	Val	Pro	Ala
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Phe	Asn	Val	Ile	Asn	Gly	Gly	Ser	His	Ala	Gly	Asn	Lys	Leu	Ala	Met
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Gln	Glu	Phe	Met	Ile	Leu	Pro	Val	Gly	Ala	Ala	Asn	Phe	Arg	Glu	Ala
			165						170					175	
Met	Arg	Ile	Gly	Ala	Glu	Val	Tyr	His	Asn	Leu	Lys	Asn	Val	Ile	Lys
			180					185					190		
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		195					200					205			
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225					230					235					240
Val	Ala	Ala	Ser	Glu	Phe	Phe	Arg	Ser	Gly	Lys	Tyr	Asp	Leu	Asp	Phe
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		260					265						270		
Asp	Leu	Tyr	Lys	Ser	Phe	Ile	Lys	Asp	Tyr	Pro	Val	Val	Ser	Ile	Glu
	275						280					285			
Asp	Pro	Phe	Asp	Gln	Asp	Asp	Trp	Gly	Ala	Trp	Gln	Lys	Phe	Thr	Ala
	290				295						300				
Ser	Ala	Gly	Ile	Gln	Val	Val	Gly	Asp	Asp	Leu	Thr	Val	Thr	Asn	Pro
305				310						315					320
Lys	Arg	Ile	Ala	Gln	Ala	Val	Asn	Glu	Lys	Ser	Cys	Asn	Cys	Leu	Leu
			325						330					335	
Leu	Lys	Val	Asn	Gln	Ile	Gly	Ser	Val	Thr	Glu	Ser	Leu	Gln	Ala	Cys
		340					345						350		
Lys	Leu	Ala	Gln	Ala	Asn	Gly	Trp	Gly	Val	Met	Val	Ser	His	Arg	Ser
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Gly	Glu	Thr	Glu	Asp	Thr	Phe	Ile	Ala	Asp	Leu	Val	Val	Gly	Leu	Cys
	370				375						380				
Thr	Gly	Gln	Ile	Lys	Thr	Gly	Ala	Pro	Cys	Arg	Ser	Glu	Arg	Leu	Ala
385					390					395					400
Lys	Tyr	Asn	Gln	Leu	Leu	Arg	Ile	Glu	Glu	Glu	Leu	Gly	Ser	Lys	Ala
			405						410					415	
Lys	Phe	Ala	Gly	Arg	Asn	Phe	Arg	Asn	Pro	Leu	Ala	Lys			
		420						425							

&lt;210&gt; 3657

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3657

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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40						45			
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50					55					60				
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65					70					75				80	
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
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Arg Thr Arg

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 180  
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 240  
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 1025

&lt;210&gt; 3660

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3660

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Ser	Ser	Glu	Asn	Thr	Arg	Pro	Lys	Phe	Leu	Ser	Arg	Asp	Val	Asp	Ser
			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
	35						40					45			
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50					55					60				
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
65					70				75					80	
Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
				85					90					95	
Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
			100					105					110		
Glu	Asn	Lys	Ser	Lys	Met	Lys	Met	Val	Glu	Glu	His	Met	Glu	Gln	Gln
	115						120					125			
Lys	Glu	Asn	Met	Glu	His	Leu	Lys	Ser	Leu	Lys	Ile	Glu	Ala	Glu	Asn
	130					135					140				
Lys	Tyr	Asp	Ala	Ile	Lys	Phe	Lys	Ile	Asn	Gln	Leu	Ser	Glu	Leu	Ala
145					150					155					160
Asp	Pro	Leu	Lys	Asp	Glu	Leu	Asn	Leu	Ala	Asp	Ser	Glu	Val	Asp	Asn
				165					170					175	
Gln	Lys	Arg	Gly	Lys	Arg	His	Tyr	Glu	Lys	Lys	Gln	Lys	Glu	His	Leu
			180					185					190		
Asp	Thr	Leu	Asn	Lys	Lys	Lys	Arg	Glu	Leu	Asp	Met	Lys	Glu	Lys	Glu
		195					200					205			
Leu	Glu	Glu	Lys	Met	Ser	Gln	Ala	Arg	Gln	Ile	Cys	Pro	Glu	Arg	Ile

210	215	220
Glu Val Glu Lys Ser Ala	Ser Ile Leu Asp Lys	Glu Ile Asn Arg Leu
225	230	235
Arg Gln Lys Ile Gln Ala	Glu His Ala Ser His	Gly Asp Arg Glu Glu
	245	250
Ile Met Arg Gln Tyr Gln	Glu Ala Arg Glu Thr	Tyr Leu Asp Leu Asp
	260	265
Ser Lys Val Arg Thr Leu	Lys Lys Phe Ile Lys	Leu Leu Gly Glu Ile
	275	280
Met Glu His Arg Phe Lys	Thr Tyr Gln Gln Phe	Arg Arg Cys Leu Thr
	290	295
Leu Arg Cys Lys Leu Tyr	Phe Asp Asn Leu Leu	Ser Gln Arg Ala Tyr
305	310	315
Cys Gly Lys Met Asn Phe	Asp His Lys Asn Glu	Thr Leu Ser Ile Ser
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Val Gln Pro Gly Glu		
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&lt;210&gt; 3661

&lt;211&gt; 1117

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3661

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<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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Asp	His	Arg	Leu	Ser	Ile	Ser	Lys	Lys	Thr	Ala	Asn	Gly	Gly	Leu	Lys	20	25	30	
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys	35	40	45	
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala	50	55	60	
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val	65	70	75	80
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr	85	90	95	
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala	100	105	110	
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr	115	120	125	
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr	130	135	140	
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp	145	150	155	160
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu	165	170	175	
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile	180	185	190	
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile	195	200	205	
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val	210	215	220	
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly	225	230	235	240
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr	245	250	255	
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp	260	265	270	
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser	275	280	285	
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr	290	295	300	
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn				

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Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln
          340          345          350
Gly Asn Asp Pro Glu Pro Ser Gly Asp Ser Pro Leu Gly Leu Cys Gln
          355          360          365
Ser Glu Cys
          370

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&lt;210&gt; 3663

&lt;211&gt; 481

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3663

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480
g
481

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&lt;210&gt; 3664

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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2821

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Asp Glu Phe Ser Val Ser Ser Val Leu Ala Ser Asp Val Ile His Ala		1165
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<400> 3670

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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
			35				40					45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
			50			55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
				85					90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
			115				120					125			
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
			130				135				140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165						170					175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180					185					190		
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
			195				200						205		
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
			210				215					220			
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245						250					255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

	260		265		270										
Ala	Asp	Lys	Asn	Tyr	Thr	Glu	Asp	Leu	Ser	Lys	Leu	Gln	Ser	Leu	Ile
	275						280					285			
Cys	Gly	Pro	Ser	Phe	Asp	Ile	Ala	Ser	Ile	Ile	Pro	Phe	Leu	Glu	Pro
	290						295				300				
Leu	Ser	Glu	Asp	Thr	Ile	Ala	Gly	Leu	Ser	Val	His	Val	Leu	Cys	Arg
305					310					315				320	
Thr	Arg	Leu	Lys	Glu	Tyr	Glu	Gln	Cys	Ile	Asp	Ile	Leu	Leu	Glu	Arg
			325					330				335			
Cys	Pro	Glu	Ala	Val	Ile	Pro	Tyr	Ala	Asn	His	Glu	Leu	Lys	Glu	Glu
		340						345				350			
Asn	Arg	Thr	Leu	Trp	Trp	Lys	Lys	Leu	Leu	Pro	Glu	Leu	Cys	Gln	Arg
	355					360					365				
Ile	Lys	Cys	Gly	Gly	Glu	Lys	Tyr	Gln	Leu	Tyr	Leu	Ser	Ser	Leu	Lys
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Ala															
385															

&lt;210&gt; 3671

&lt;211&gt; 828

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3671

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120
aggggcatctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcatggtct
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gatggaaaga taagcaagaa gagttaattt ctaatcaata tgataaaaag gtcagagagc
240
agtttctgaa aaacatgttt ttgagttgag tcttgaaaga caaggagatg ttagtaaagc
300
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360
aagagcatgc cccatttgga gaagcatcaa gaagcccacg cgttagaagc accggcccca
420
tgagacaaag acacagctag agagattgac taggccatgt cggaatgtcc tcttatttta
480
tacatacata agcatataga tacatatagc caaagttacc tttttaatga tcttttttac
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660
gttattggcc agtttttagc caatccaact gacctagtga aggttcagat gcaaatggaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
780
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828

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&lt;210&gt; 3672

<211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 3672

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          20           25           30
Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
          35           40           45
Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
          50           55           60
Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
65           70           75           80
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
          85           90           95
Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
          100          105          110
Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
          115          120

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<210> 3673  
 <211> 1052  
 <212> DNA  
 <213> Homo sapiens

<400> 3673

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120
gagcagtggg acagcttcaa tgatcaacat gtcagcagga taacacaaga ggacattaag
180
aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc
240
acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
300
gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa
360
gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt
420
ttgcatccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca
480
ttaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aatacccctg
540
gattgctgtc gccttgtaa atatgatgag tttcatgatt atctagaacg gtcatatgaa
600
ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt
660
gatctgctgt tggagacgag aaagcctgat caggttttcc aatcttataa acctggaggg
720
gagccatttt acaccatttt tagttggtct gtacttagaa ttttctgag aaaggttttt
780

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<210> 3674
<211> 263
<212> PRT
<213> Homo sapiens
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<210> 3675  
<211> 837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3675

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120
gacagctata ttgtgctgtg caaggctgtg gttatgacca gagatgactc cagcggggga
180
tggttccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
240
gaaggcaatg gacgaagcgg ctttctcatc catggtgaac gacagaaaga caaactggtg
300
gtattggaat gctatgtaag aaaggacttg gtctacacca aagccaatcc aacgtttcat
360
cactggaagg tcgataatag gaagtttgga cttactttcc aaagccctgc tgatgcccga
420
gcctttgaca ggggagtaag gaaagcaatc gaagacctta tagaagaagt agaaaatgat
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720
aaaaattctc cactgcagca catccaggta tcaaatcaga gggttaaaga agccatagac
780
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837

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&lt;210&gt; 3676

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

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Met Thr Glu Glu Thr His Pro Asp Asp Asp Ser Tyr Ile Val Arg Val
1          5          10          15
Lys Ala Val Val Met Thr Arg Asp Asp Ser Ser Gly Gly Trp Phe Pro
20          25          30
Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
35          40          45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50          55          60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65          70          75          80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85          90          95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
100         105         110
Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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 Asn Gln Arg Pro Arg Val Tyr Ser Cys His  
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<210> 3677  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 3677  
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 tgccgaaaga gcatggagga agatgaaagg cagacaggtc gagaacatgc agtggcgatc  
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 240  
 tcttctcct catcctctc atcctcgtcc tcctcttct gccctgggaa ctcgggagac  
 300  
 tgggataccta gctcgttct gtcggcacat aagctctcgg gcctctggaa ttccccacat  
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 418

<210> 3678  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 3678  
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 Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp  
 35 40 45  
 Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His  
 50 55 60  
 Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser  
 65 70 75 80  
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly  
 85 90 95  
 Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu  
 100 105 110  
 Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser  
 115 120 125  
 Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala  
 130 135

<210> 3679  
 <211> 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

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 120  
 gagatcgagc agatcaaggc ccagctggag acagccctga agtggaggaa ctatgagggtg  
 180  
 aagctgcggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat  
 240  
 gacctggagt cggtgcccat gacctgggac cctgtggacc agaaccacag gctgctcacg  
 300  
 ctggagggttc ctggagtgc tgagagccgc ccctcagtgc tacggggcga ccacctgttt  
 360  
 gcccttttgt cctcggagac acaccaggag gaccccatca catataaggg ctttgtgcac  
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 480  
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 567

&lt;210&gt; 3680

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

Arg	Val	Lys	Gly	Tyr	Asp	Leu	Glu	Leu	Ser	Met	Ala	Leu	Gly	Thr	Tyr
1				5					10					15	
Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20				25						30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
		35					40					45			
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
	50					55					60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65				70						75				80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
			85						90					95	
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105					110		
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
		115					120					125			
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
	130					135					140				
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
145			150							155				160	
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
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180

185

<210> 3681  
 <211> 788  
 <212> DNA  
 <213> Homo sapiens

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<210> 3682  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 3682  
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 20 25 30  
 Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro Pro Arg His His  
 35 40 45  
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg  
 50 55 60  
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg  
 65 70 75 80  
 Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

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360					
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1020					

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<212> PRT

<213> Homo sapiens

<400> 3684

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&lt;210&gt; 3685

&lt;211&gt; 1293

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3685

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&lt;210&gt; 3690

&lt;211&gt; 504

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

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&lt;210&gt; 3691

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3691

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<213> Homo sapiens

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<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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&lt;210&gt; 3695

&lt;211&gt; 1615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3695

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&lt;210&gt; 3696

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3696

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Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3697

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&lt;210&gt; 3698

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3698

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Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Val	Cys	Gln	Pro	Arg	Cys
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Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser
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Val	Lys	Gly	Gln	Ile	Arg	Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	Gln	Leu
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&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala
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Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
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Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
			100					105					110		
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys
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<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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&lt;211&gt; 1737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<400> 3706  
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<212> PRT

<213> Homo sapiens

<400> 3708

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			20					25					30		
Glu	Asn	Ala	Phe	Asp	Asn	Ile	Gln	Leu	Pro	Tyr	Met	Ile	Lys	Thr	Leu
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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
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<211> 1366

<212> DNA

<213> Homo sapiens

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<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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Glu	Leu	Leu	Ser	Leu	Pro	Ala	Ala	Ser	Leu	Ala	Asp	Gln	Asp	Ile	Phe
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Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
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Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
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Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val
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Phe	Val	Glu	Ala	Ser	Pro	Val	Leu	Ala	Ala	Arg	Gln	Asp	Val	Ala	Tyr
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His	Val	Val	Tyr	Arg	Glu	Gly	Pro	Leu	Tyr	Pro	Val	Asn	Gln	Leu	Arg
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Ile	Glu	Gln	Leu	Gly	Leu	Gly	Ser	Arg	Arg	Lys	Ala	Ala	Leu	Val	Val
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Pro	Ala	Phe	Glu	Thr	Leu	Arg	Tyr	Arg	Phe	Ser	Phe	Pro	His	Ser	Lys
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&lt;210&gt; 3713

&lt;211&gt; 1719

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3713

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900

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&lt;210&gt; 3714

&lt;211&gt; 488

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3714

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			20					25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg	His
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Ser	Glu	Asn	Glu	Thr	Ser	Asp	Arg	Glu	Asp	Gly	Pro	Pro	Lys	Gly	His
	50					55					60				
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Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
				85					90					95	
Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
			100					105					110		
Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys	Leu
		115					120					125			
Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala	Ser
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           195           200           205
Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
           210           215           220
Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
225           230           235           240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
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Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
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Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
           275           280           285
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
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Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu
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385           390           395           400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp
           405           410           415
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
           420           425           430
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
           435           440           445
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
           450           455           460
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Gly Asp Glu Glu Glu Glu Phe
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&lt;210&gt; 3715

&lt;211&gt; 288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3715

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<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 3716  
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Gly Lys Ile Arg Ser Tyr Glu Glu His Leu Glu Lys His Arg Lys Asp  
35 40 45  
Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys  
50 55 60  
Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile  
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&lt;210&gt; 3718

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3718

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			20					25					30		
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
			35				40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
	50				55					60					
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65				70				75					80		
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
			85					90					95		
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
			100				105						110		
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
	115				120						125				
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

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 165 170 175  
 Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln  
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 Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn  
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 Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln  
 225 230 235 240  
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 245 250 255  
 Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu  
 260 265 270  
 Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys  
 275 280 285  
 Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg  
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 Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser  
 325 330 335  
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 Arg His Ile Val Lys Pro Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln  
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&lt;210&gt; 3719

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3719

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 35 40 45  
 Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala  
 50 55 60  
 Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His  
 65 70 75 80  
 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr  
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 <213> Homo sapiens

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&lt;210&gt; 3722

&lt;211&gt; 1216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3722

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		20						25					30		
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
		35					40					45			
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
	50					55					60				
Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
65					70					75					80
Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
			85						90					95	
Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
		100						105					110		
Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
	115					120						125			
Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
	130					135					140				
Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
145					150					155				160	
Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

2871

2

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 Ile Thr Leu Leu Val Ala Lys Phe Val Thr Ile Leu Glu Gly Val Leu  
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 Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu  
                                  1060                      1065                      1070  
 Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro  
                                  1075                      1080                      1085  
 Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln  
                                  1090                      1095                      1100  
 Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu  
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 Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu  
                                  1125                      1130                      1135  
 Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu  
                                  1140                      1145                      1150  
 Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val  
                                  1155                      1160                      1165  
 Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg  
                                  1170                      1175                      1180  
 Leu Thr Val Glu Glu Ala Thr Ala Ser Val Ser Glu Gly Gly Gly Leu  
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<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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 120  
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 180  
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 300  
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 360  
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 420  
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 660  
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 720

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<210> 3724

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3724

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			20					25					30		
Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Asn	Pro	Asn	Glu	Lys	Leu	Lys	Val
		35					40					45			
Asn	Phe	Gly	Thr	Pro	Glu	Phe	Leu	Ser	Pro	Glu	Val	Val	Asn	Tyr	Asp
	50					55				60					
Gln	Ile	Ser	Asp	Lys	Thr	Asp	Met	Trp	Ser	Met	Gly	Val	Ile	Thr	Tyr
65					70					75				80	
Met	Leu	Leu	Ser	Gly	Leu	Ser	Pro	Phe	Leu	Gly	Asp	Asp	Asp	Thr	Glu
			85						90					95	
Thr	Leu	Asn	Asn	Val	Leu	Ser	Gly	Asn	Trp	Tyr	Phe	Asp	Glu	Glu	Thr
		100						105					110		
Phe	Glu	Ala	Val	Ser	Asp	Glu	Ala	Lys	Asp	Phe	Val	Ser	Asn	Leu	Ile
	115						120						125		
Val	Lys	Asp	Gln	Arg	Ala	Arg	Met	Asn	Ala	Ala	Gln	Cys	Leu	Ala	His
	130					135					140				
Pro	Trp	Leu	Asn	Asn	Leu	Ala	Glu	Lys	Ala	Lys	Arg	Cys	Asn	Arg	Arg
145				150						155				160	
Leu	Lys	Ser	Gln	Ile	Leu	Leu	Lys	Lys	Tyr	Leu	Met	Lys	Arg	Arg	Trp
			165						170					175	
Lys	Lys	Asn	Phe	Ile	Ala	Val	Ser	Ala	Ala	Asn	Arg	Phe	Lys	Lys	Ile
		180						185					190		
Ser	Ser	Ser	Gly	Ala	Leu	Met	Ala	Leu	Gly	Val					
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<210> 3725

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 3725

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180  
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240  
ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc  
300

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 720  
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<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

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Gly	His	Val	Ile	Ser	Ala	His	Gly	Leu	Ser	Val	Leu	Asn	Leu	Arg	Asp
			20					25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35					40					45			
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
65				70					75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85				90						95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
			100				105						110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

115	120	125
Ser Val Ala Asn Lys His Gly	His Tyr Pro Asn Thr Ile Ala Glu Lys	
130	135	140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr		
145	150	155
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu		160
	165	170
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu		175
	180	185
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu		190
195	200	205
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu		
210	215	220
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser		
225	230	235
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser		240
	245	250
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu		255
	260	265
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp		270
275	280	285
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala		
290	295	300
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly		
305	310	315
Lys Tyr Gly Arg Glu		320
	325	

&lt;210&gt; 3727

&lt;211&gt; 630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3727

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240  
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420  
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480  
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540  
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600

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630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

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Lys	Leu	Thr	Leu	Thr	Arg	Pro	Thr	Pro	Leu	Val	Thr	Ala	Gly	Pro	Leu
			20					25					30		
Val	Thr	Pro	Thr	Pro	Ala	Gly	Thr	Leu	Asp	Pro	Ala	Glu	Lys	Gln	Glu
		35					40					45			
Thr	Gly	Cys	Pro	Pro	Leu	Gly	Leu	Glu	Ser	Leu	Arg	Val	Ser	Asp	Ser
	50					55					60				
Arg	Leu	Glu	Ala	Ser	Ser	Ser	Gln	Ser	Phe	Gly	Leu	Gly	Pro	His	Arg
65				70					75					80	
Gly	Arg	Leu	Asn	Ile	Gln	Ser	Gly	Leu	Glu	Asp	Gly	Asp	Leu	Tyr	Asp
			85					90						95	
Gly	Ala	Trp	Cys	Ala	Glu	Glu	Gln	Asp	Ala	Asp	Pro	Trp	Phe	Gln	Val
			100					105					110		
Asp	Ala	Gly	His	Pro	Thr	Arg	Phe	Ser	Gly	Val	Ile	Thr	Gln	Gly	Arg
		115					120					125			
Asn	Ser	Val	Trp	Arg	Tyr	Asp	Trp	Val	Thr	Ser	Tyr	Lys	Val	Gln	Phe
	130					135						140			
Ser	Asn	Asp	Ser	Arg	Thr	Trp	Trp	Gly	Ser	Arg	Asn	His	Ser	Ser	Gly
145				150						155				160	
Met	Asp	Ala	Val	Phe	Pro	Ala	Asn	Ser	Asp	Pro	Glu	Thr	Pro	Val	Leu
			165					170						175	
Asn	Leu	Leu	Pro	Glu	Pro	Gln	Val	Ala	Arg	Phe	Ile	Arg	Leu	Leu	Pro
			180					185					190		
Gln	Thr	Trp	Leu	Gln	Gly	Gly	Ala	Pro	Cys	Leu	Arg	Ala	Glu	Ile	Leu
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Ala	Cys														
	210														

<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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300

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 420  
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 480  
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&lt;210&gt; 3730

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3730

Met	Ala	Phe	Gly	Ala	Ser	Thr	Phe	Pro	Pro	Gln	Tyr	Leu	Ser	Ser	Glu
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Ile	Thr	Leu	His	Pro	Tyr	Ala	Tyr	Ser	Pro	Tyr	Thr	Leu	Asp	Ser	Thr
			20					25					30		
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<210> 3731
<211> 1704
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 3731

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<210> 3732

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3732

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			20					25					30		
Glu	Gly	Ile	Thr	Asp	Ala	Ser	Ser	Cys	Ala	Val	Leu	Leu	Pro	Ala	Ser
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Leu	Phe	Val	Asn	Ser	His	Pro	Gly	Ile	Asp	Arg	Pro	Gly	Met	Leu	Cys
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Gln	Ala	Asn	Asn	Cys	Phe	Ser	Thr	Gly	Leu	Ser	Arg	Arg	Val	Leu	Leu
			85						90					95	
Thr	Asn	Val	Val	Thr	Gly	His	Arg	Gln	Ser	Phe	Gly	Thr	Asn	Ser	Asp
		100						105					110		
Val	Leu	Ala	Gln	Gln	Phe	Ala	Leu	Met	Ala	Pro	Leu	Leu	Phe	Asn	Gly
		115					120					125			
Cys	Arg	Ser	Gly	Glu	Ile	Phe	Ala	Ile	Asp	Leu	Arg	Cys	Gly	Asn	Gln
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Gly	Lys	Gly	Trp	Lys	Ala	Thr	Arg	Leu	Phe	His	Asp	Ser	Ala	Val	Thr
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Ser	Val	Arg	Ile	Leu	Gln	Asp	Glu	Gln	Tyr	Leu	Met	Ala	Ser	Asp	Met
			165						170					175	
Ala	Gly	Lys	Ile	Lys	Leu	Trp	Asp	Leu	Arg	Thr	Thr	Lys	Cys	Val	Arg
		180						185					190		
Gln	Tyr	Glu	Gly	His	Val	Asn	Glu	Tyr	Ala	Tyr	Leu	Pro	Leu	His	Val
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His	Glu	Glu	Glu	Gly	Ile	Leu	Val	Ala	Val	Gly	Gln	Asp	Cys	Tyr	Thr
	210					215					220				
Arg	Ile	Trp	Ser	Leu	His	Asp	Ala	Arg	Leu	Leu	Arg	Thr	Ile	Pro	Ser
225					230					235				240	
Pro	Tyr	Pro	Ala	Ser	Lys	Ala	Asp	Ile	Pro	Ser	Val	Ala	Phe	Ser	Ser
			245						250					255	
Arg	Leu	Gly	Gly	Ser	Arg	Gly	Ala	Pro	Gly	Leu	Leu	Met	Ala	Val	Gly
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Gln	Asp	Leu	Tyr	Cys	Tyr	Ser	Tyr	Ser							
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<210> 3733

<211> 515

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3733

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 240  
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 515

&lt;210&gt; 3734

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

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Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
			20					25					30		
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
		35					40				45				
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
	50					55					60				
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70				75					80	
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
			85					90					95		
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
			100					105					110		
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
		115					120					125			
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135					140				
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
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Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
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&lt;210&gt; 3735

&lt;211&gt; 2512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 3736

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3736

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			20					25					30		
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
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Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
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Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
				85					90					95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

	115		120		125										
Lys	Val	Glu	Pro	Arg	Ile	Val	Ile	Val	Glu	Glu	Ala	Ala	Glu	Val	Leu
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Glu	Ala	His	Thr	Ile	Ala	Thr	Leu	Ser	Lys	Ala					
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&lt;210&gt; 3737

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3737

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&lt;210&gt; 3738

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 35 40 45  
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg  
 50 55 60  
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala  
 65 70 75 80  
 Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu  
 85 90 95  
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe  
 100 105 110  
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu  
 115 120 125  
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr  
 130 135 140  
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe  
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 165 170 175  
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 180 185 190  
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 195 200 205  
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu  
 210 215 220  
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr  
 225 230 235 240  
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 245 250 255  
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro  
 260 265 270  
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala  
 275 280 285  
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro  
 290 295 300  
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys  
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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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 840  
 ggagaatcca ctggaagccc tggacagtgg gagtgcagcg cccccagc gtggaggcca  
 900  
 agagcacaca gactgaagc tccaggacac cctcaggagg acggcaaggg acaattggct  
 960  
 ggtgagagcc cgggtcaccg ggaaccttcg cctgggtcta aacaggattt gccttcagat  
 1020  
 tgcctcagaa acgctgggtg gacttcgcgt aacttcccat tcacagggca gccggcagcc  
 1080  
 gcgcgcgcgc gcctcgccc agctcctggc gccgcagatc gcccgctccg cgttcccaaa  
 1140  
 agccccgcgc tcgctcagaa gctcgggcag cctcgcgacc ctcacctacc cctcccaata  
 1200  
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 1252

&lt;210&gt; 3740

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3740

Met	Gly	Lys	Phe	Leu	His	Gln	Gly	Leu	Gly	Glu	Ser	Thr	Gly	Ser	Pro
1				5				10						15	
Gly	Gln	Trp	Glu	Ser	Ala	Ala	Pro	Pro	Val	Trp	Arg	Pro	Arg	Ala	His
			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
		35					40					45			
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

```

      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
      130              135

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<210> 3741  
 <211> 562  
 <212> DNA  
 <213> Homo sapiens

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<400> 3741
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60
gtcgtgtcca ctgtggggat ccacgtcctg actaaccttg tgttcctaga aatccctcac
120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaactctg ccacaatctg
300
cgagaaggga ggcgggggctt ccgaggggcaa agtgcccctg ggaagggatc cgcagggaac
360
agctttgaaa ggaccacagc cccagccac gaggggagca agcacgagcc ggggagagag
420
ctctgcgctc gcacacggga ttcattctcg ccgcctctgc ccgtttccag caacacggag
480
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540
ctgggctgct ttcattcacg gt
562

```

<210> 3742  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3742
Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```

65					70					75					80
Tyr	Asp	Cys	Pro	Asn	Cys	Val	Gln	Phe	Phe	Leu	Ser	Phe	Glu	Tyr	Glu
				85					90					95	
Val	Trp	Ser	Glu	Lys	Arg	Leu	Ser	Gln	Ala	Trp	Ala	Ala	Leu	Ser	Gly
			100					105					110		
Thr	His	Ser	Gln	Trp	Glu	Phe	Trp	Val	Gly	Phe	Arg	Arg	His	Arg	Ser
		115					120					125			
Ala	Gly	Glu	Gly	Phe	Leu	Gly	Thr	Gln	Gly						
	130						135								

&lt;210&gt; 3743

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3743

```

nntcatgagc cttcttaca gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgcccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcggttac ctggatccct ggaaggat
468

```

&lt;210&gt; 3744

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3744

Xaa	His	Glu	Pro	Ser	Tyr	Lys	Leu	His	Phe	Gly	Lys	Ala	Leu	Thr	Met
1				5					10					15	
Ala	Glu	Ala	Glu	Gly	Asn	Ala	Ser	Cys	Thr	Val	Ser	Leu	Gly	Gly	Ala
			20					25					30		
Asn	Met	Ala	Glu	Thr	His	Lys	Ala	Met	Ile	Leu	Gln	Leu	Asn	Pro	Ser
		35					40					45			
Glu	Asn	Cys	Thr	Trp	Thr	Ile	Glu	Arg	Pro	Glu	Asn	Lys	Ser	Ile	Arg
	50					55				60					
Ile	Ile	Phe	Ser	Tyr	Val	Gln	Leu	Asp	Pro	Asp	Gly	Ser	Cys	Glu	Ser
65					70					75				80	
Glu	Asn	Ile	Lys	Val	Phe	Asp	Gly	Thr	Ser	Ser	Asn	Gly	Pro	Leu	Leu
			85					90					95		
Gly	Gln	Val	Cys	Ser	Lys	Asn	Asp	Tyr	Val	Pro	Val	Phe	Glu	Ser	Ser
			100				105					110			
Ser	Ser	Thr	Leu	Thr	Phe	Gln	Ile	Val	Thr	Asp	Ser	Ala	Arg	Ile	Gln

115  
Arg Thr Val Phe Val Phe  
130

120

125

&lt;210&gt; 3745

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3745

acgcgtcgaa aggggaagagc agaggacgct ggctctcatg gcaggatggg gtgtgtacgg  
60  
gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag  
120  
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac  
180  
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga  
240  
tgcagcatct gctccggacg cctctcgtct tcggtgccag gcctgccagg ccaagccccg  
300  
attctcaggg gcggcaggag gtgggaggca cgtttgggag gatcc  
345

&lt;210&gt; 3746

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3746

Met	Ala	Gly	Trp	Cys	Val	Tyr	Gly	Thr	Leu	Trp	Glu	Arg	Lys	Thr	Ala
1				5					10					15	
Thr	Cys	Gly	Leu	Ala	Ala	Trp	Arg	Arg	His	Met	Ser	Arg	Glu	His	Val
			20					25					30		
Ser	Pro	Gly	Arg	Ser	Leu	Val	Pro	Cys	Val	Leu	Val	Leu	Gly	Thr	Thr
		35					40					45			
Arg	Thr	Gln	Pro	Cys	Ser	Pro	Arg	Ser	Cys	Ser	His	Ser	His	Gly	Ile
		50				55					60				
Ala	Trp	Ser	Asp	Ala	Ala	Ser	Ala	Pro	Asp	Ala	Ser	Arg	Cys	Arg	Cys
65					70				75					80	
Gln	Ala	Cys	Gln	Ala	Lys	Pro	Arg	Phe	Ser	Gly	Ala	Ala	Gly	Gly	Gly
			85						90					95	
Arg	His	Val	Trp	Ala	Asp										
					100										

&lt;210&gt; 3747

&lt;211&gt; 800

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3747

cctaggcgag gcgctggcgc tggggctctgg ctggcgctcat gcgtgccacg ctctcctcta  
60  
cgcgccggac cctgggatgc tcttcggccg catcccgtg cgctacgcca tactggtgag  
120

aagggggcgc gcccgccac tttctgctg agccccgcac cctctctggt ggtctcctct  
180  
ggggcgcccc tgccaatccc cgcttcccc tcccgcagat gcagatgcgc ttcgatggac  
240  
gcctgggctt ccccggcgga ttcgtggaca cgcaggacag aagcctagag gacgggctga  
300  
accgcgagct gcgcgaggag ctgggcgaag cggctgccgc tttccgcgtg gagcgactg  
360  
actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggcccactt ctatgccaag  
420  
cgtctgacgc tcgaggagct gttggctgtg gagggcggcg caacacgcgc caaggaccac  
480  
gggctggagg tgggaccagc ctgggactct gtccctttcc caatttcctc ttctcccaaa  
540  
gctttctctc cccaagaaa gcatccctgg agaaaagtct ttgcccctct gaccttgccc  
600  
tctccccagc tttcttggtg gagttgggat cgtgatcatc tatactctga attagtactg  
660  
ccaacctggg ctttctgtaa aggtctttcc caccctttac caggagagat cttttctaga  
720  
acacactcat ccattgtctt ctgctgttcc ctattgacag tgtgatagat tatcacatta  
780  
tctaggtgtg gcaacctagg  
800

&lt;210&gt; 3748

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
1				5					10					15	
Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
			20					25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35				40						45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50					55					60				
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65					70					75				80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
				85					90					95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
			100					105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
		115					120					125			
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
						130		135							

&lt;210&gt; 3749

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3749

cgcgccccct gggaggatcc tgccaagtgg gtgatggaca catatccatg ggcagccagc  
 60  
 ccacaacagc acgagtggcc tcccctgctg cagttacggc ctgaggatgt cggcttcgac  
 120  
 ggctactcca tgccctggga gggatcgaca agcaagcaga tgccccccag tgatgctgaa  
 180  
 ggtgaccgcg tgatgaacat gctgatgagg ctgcaggagg cagccaacta ctccagcccc  
 240  
 cagagctatg acagcgactc caacagcaac agccatcacg atgacatctt ggactcctct  
 300  
 ttggagtcca ctctgtgaca ggggcccggg gccagcgcc ctctcttctt cctcaccgca  
 360  
 ttccacctgc atccccaca tcacctgaa gatgacttcc tgagccagcc cccagccaca  
 420  
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 480  
 atcccgggccc agctgcctgc ggaccgcttc cttccacagc gagaactgca ctaccttctg  
 540  
 ttgtacttta attattgttt tgccctgttg ctgtgacctc cctaagacac tgaagatact  
 600  
 tctcgggaaa ggatcatcgc cgttgaaatg aaaaaaaaaa aaaaaaaaaa  
 648

&lt;210&gt; 3750

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5					10					15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35				40					45				
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55					60					
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65				70					75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85				90						95		
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100				105								

&lt;210&gt; 3751

&lt;211&gt; 554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3751

gcgcgcctgt ctgccctcgc acgtgcgctg gcagggccgc cgctcgcgcc tcaccatgga  
 60

cctggccccg ctgctgctcg cggtcgggtc gccccgagcg gggccaaggg cgtttcctac  
 120  
 acgcagggcc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca  
 180  
 gggccagctt ttcttgatg attccaaaat gaagaatttc atcacctgct tcaaagaccc  
 240  
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 300  
 cgctttcccc ttcctctcgc cctgcggcag agagcgcaac ttcctgcgct gcgaggaccg  
 360  
 gccggtggtc ttcacgcacc tgetgaccgc ggaccacggg cctccgcgcc tctcctactg  
 420  
 cggcggtggc gaggccttg ccgtgccctt cgagccggcg cgcttctgc cctggccgc  
 480  
 caacgggcgc ctgtaccacc cggcgccgga gcgtgcgggc ggcgtgggccc tgggtgcgcc  
 540  
 ttcgcccctg gccc  
 554

<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

Ala	Arg	Leu	Ser	Ala	Leu	Ala	Arg	Ala	Leu	Ala	Gly	Pro	Pro	Pro	Arg
1				5					10					15	
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20					25					30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35					40					45			
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
	50						55					60			
Pro	Gly														
65															

<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 gaaccactc tcctaacca cccccgagag gcggagagaa tgtgggagca cttcagagag  
 120  
 gcctaggctc cgagatcgg gccatctggg ctctgaaagc aaattagttt tccaactcat  
 180  
 gtctggctcc ggcgttacc agacgcctgg aaggtccttc ctgcagtctg atcaccattt  
 240  
 ttcctgctgc actgaccaat cagctccctt tggccttcaa cctcgggaat gatggattag  
 300  
 gggagtctag aaatggacga agccctagaa acgcagctga agacgagcag aggacgcttc  
 360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg  
 420  
 gtccacatgc gacccatcgg cctgacgtgg gtgctgcaac tgaccttggc atggatcctg  
 480  
 ctagaagcct gtggagggag ccgcccactc caagccaggt cccagcaaca ccatgggctg  
 540  
 gcagctgacg tgggcaaagg caagctgcac ctggcaggac cttgttgtcc ctcagagatg  
 600  
 gacacaacag agacatcggg ccctggaaac catccagaac gctgtggagt gccgagccct  
 660  
 gaatgcgaat ccttcctgga acacctccaa cgtgcccttc gcagtcgctt ccgcctgcgg  
 720  
 ctattggggg tacgccagge acagccgctc tgcgaggagc tctgccaggc ctggttcgcc  
 780  
 aactgcgaag atgatatcac ctgcccggc acttggtcc cactctcaga aaaaaggggc  
 840  
 tgtgagccca gctgccttac ctatggacag accttcgcag acgggacgga cttttgtcgc  
 900  
 tcggctctgg gccacgcct accggtggct gctcctggag cccgtcactg cttcaacatc  
 960  
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 1020  
 cgttcccgca gccctgcac ctccatcctg gacgctgcgg gcagcgggag tggcagtggg  
 1080  
 agcggcagcg gcccctagcg gacgcgtggc cctgagttgg gggagcgacc cttccccag  
 1140  
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 1200  
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 1260  
 agaaatgacc caactctctc acttttcct ctccccttg aataaagtcg ccagctaaaa  
 1320  
 aaaaagtcca tgtccacctg agataagagc tgttggctgg attggggggg ccacatgcga  
 1380  
 cccatcggcc tgacgtgggt gctgcaactg acctcggcat ggatcc  
 1426

&lt;210&gt; 3754

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3754

Met Asp Glu Ala Leu Glu Thr Gln Leu Lys Thr Ser Arg Gly Arg Phe  
 1 5 10 15  
 Ser Ala Thr Glu Ser Leu Pro Thr Leu Glu Leu Leu Ser Gln Val Asp  
 20 25 30  
 Met Asp Cys Arg Val His Met Arg Pro Ile Gly Leu Thr Trp Val Leu  
 35 40 45  
 Gln Leu Thr Leu Ala Trp Ile Leu Leu Glu Ala Cys Gly Gly Ser Arg  
 50 55 60  
 Pro Leu Gln Ala Arg Ser Gln Gln His His Gly Leu Ala Ala Asp Leu  
 65 70 75 80  
 Gly Lys Gly Lys Leu His Leu Ala Gly Pro Cys Cys Pro Ser Glu Met

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<210> 3755
<211> 3149
<212> DNA
<213> Homo sapiens
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<400> 3755
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gctccaagta caagtaacag ccaatcagat ttgttttccg aagagaccac cagtgacaac
120
aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa
180
ctgaatgtaa cttcaccgag taaagaggag tgtgggccat gcacagacac agctcatgtc
240
tcattaatca caccaacaaa aagatcctgt ggtacagatt cacagtctga gaatgaggct
300
tcaccagtaa aacggccacg actacttgag aatacggaac ggtccgagga aaccagtcga
360
tctaaacaga agagtcgacg tcggtgcttc cagtgccaaa ccaaactgga gctgggtgcag
420
caggaattgg gatcggtgctg ctgcggttat gtgttctgta tgttacatcg cctccccgag
480
cagcacgact gcacattcga ccacatgggc cgtggccggg aggaagccat catgaaaatg
540
gtgaagctgg accggaagt ggggcgctcc tgccagcgca tcggggaggg gtgctcctga
600
aggccaggca tggccaccac gtgacgctgt tcttagttca ctaatgttag ccttatttag
660
gacaaagtca gccagacacc ttgtactggg cacgcgtcag actgcagcca gtccgtttcc
720

```

tttcttttagc cagccatcct ggtactgtag tttagggggt gatggtgggt gaaattgatt  
780  
tctggctgggt tactaagggt cctgctagcc attgtataaa attaaaacat gaagaatatt  
840  
ttttttttga gcatggctag tggattttaa acaacacata cctgtcactg ctggagtcaa  
900  
acttataaaa agccttaagt ggaaagtgtt ccagacggag actctgagtt aatagaggag  
960  
tagaagctgg tggttaaagtt cccacgacgc acatggcttt gccagaaact ctgtttaatg  
1020  
atcggccttt cacctcttca cttatcetta gtcccagtag ccaggatacc tgatggccac  
1080  
gtgtgccttg gccacgggag gctgctgaga ttggccacgt ggctgggctg ggtgggtggc  
1140  
tcactctccc acagagctgg aaatgggggg tgggggacag attcttacgg aaattttttt  
1200  
acctgacttg ctatgaaaaa actcatcaca caagaagaga aacagtaacc tcactttgaa  
1260  
aattagctcc actcaagact agtccacgaa cgagaccgc cttttctaca caggatccaa  
1320  
ggtcacgaga agcagccaga gtgccccgcc tccgccggct ctggtctgcc attcgccagt  
1380  
gcagggatct ggcacggacc agatgtggcg aatggcagca cagcgcggtg gctgggtctg  
1440  
cacactggcc tctgcagcca gatttctata ttgggagttt tttaaaaaga catttcatag  
1500  
ccaacaagaa tcagtagaag tgctgggagc agcagctggg gaagctgccg cccacgggct  
1560  
ctgccccctc cagctggagc cgcccgtgcc tccaggggcc aagaggatga tgtcgtggcc  
1620  
tccattctcg tttctatgca gcccatagt ccaaggacac ccagtccaca tctaccatat  
1680  
agcaagttta gtaagggaag gcagcatagc tcccaggac agtggggttg gatctgtcta  
1740  
gaacagcgggt ttgtggctgt ggcccagctc cgagagtgat atttgctctg gtaggtgagg  
1800  
gcctgaggggt acatttctcc acctgtgccc cctcatgttc acagaggatt tcagcagctg  
1860  
caactgcgca cgccagggtg ggaagggtgg ggggtggcct ggttgcccca tgtaggaaa  
1920  
tcactaccag tcaggtgggg ctggggctgg gtggacagga tcaggattcc cttgaaagcc  
1980  
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2340

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&lt;210&gt; 3756

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3756

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Met Asn Leu Cys Ser Lys Cys Phe Ala Asp Phe Gln Lys Lys Gln Pro
  1             5             10             15
Asp Asp Asp Ser Ala Pro Ser Thr Ser Asn Ser Gln Ser Asp Leu Phe
      20             25             30
Ser Glu Glu Thr Thr Ser Asp Asn Asn Thr Ser Ile Thr Thr Pro
      35             40             45
Thr Leu Ser Pro Ser Gln Gln Pro Leu Pro Thr Glu Leu Asn Val Thr
      50             55             60
Ser Pro Ser Lys Glu Glu Cys Gly Pro Cys Thr Asp Thr Ala His Val
      65             70             75             80
Ser Leu Ile Thr Pro Thr Lys Arg Ser Cys Gly Thr Asp Ser Gln Ser
      85             90             95
Glu Asn Glu Ala Ser Pro Val Lys Arg Pro Arg Leu Leu Glu Asn Thr
      100            105            110
Glu Arg Ser Glu Glu Thr Ser Arg Ser Lys Gln Lys Ser Arg Arg Arg
      115            120            125
Cys Phe Gln Cys Gln Thr Lys Leu Glu Leu Val Gln Gln Glu Leu Gly
      130            135            140
Ser Cys Arg Cys Gly Tyr Val Phe Cys Met Leu His Arg Leu Pro Glu

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145		150		155		160
Gln His Asp Cys Thr Phe Asp His Met Gly Arg Gly Arg Glu Glu Ala						
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Arg Ile Gly Glu Gly Cys Ser						
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&lt;210&gt; 3757

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3757

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1046

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&lt;210&gt; 3758

&lt;211&gt; 199

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3758

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          20           25           30
Gly Lys Ser Gly Leu Leu Thr Ser His Thr Thr Asp Ser Leu Gln Leu
          35           40           45
Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
          50           55           60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
65           70           75           80
Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
          85           90           95
Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
          100          105          110
Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
          115          120          125
Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
          130          135          140
Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
145          150          155          160
Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
          165          170          175
Asp Pro Gly Leu Cys Gly Leu Val Val Ala Leu Ala Glu Ile Phe
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Phe Arg Asp Gly Lys Ser Phe
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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120
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180
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240
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300
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420
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480
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540

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 660  
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 720  
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<210> 3760

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3760

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Arg	Asn	Pro	Glu	His	Cys	Pro	Cys	Gly	Glu	Lys	Arg	Asp	Trp	Glu	Glu
		20						25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
		50				55					60				
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
65					70				75					80	
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
				85				90						95	
Phe	Val	Leu	Leu												
															100

<210> 3761

<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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 240  
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 360  
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 <212> PRT  
 <213> Homo sapiens

<400> 3762  
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<210> 3763  
 <211> 1340  
 <212> DNA  
 <213> Homo sapiens

<400> 3763  
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 240  
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<210> 3764

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764

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			20					25					30		
Ser	Pro	Arg	Cys	Ala	Ala	Thr	Met	Ala	Ser	Ser	Asp	Glu	Asp	Gly	Thr
		35					40					45			
Asn	Gly	Gly	Ala	Ser	Glu	Ala	Gly	Glu	Asp	Arg	Glu	Ala	Pro	Gly	Lys
	50					55					60				
Arg	Arg	Arg	Leu	Gly	Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp
65					70					75				80	
Ile	Ala	Met	Thr	Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg
			85						90					95	
Phe	Tyr	Met	Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln
		100						105					110		
Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His
	115						120					125			
Cys	Leu	Ile	Gly	Ile	Val	Pro	Thr	Ser	Val	Ile	Val	Thr	Gly	Val	Gln
	130					135					140				
Val	Ser	Ser	Arg	Ile	Phe	Met	Val	Trp	Leu	Ile	Thr	His	Ser	Ile	Lys
145					150					155					160
Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	Trp	Thr
			165						170					175	
Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asp
		180						185					190		
His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	Phe	Phe	Ile	Ile
	195						200				205				
Leu	Tyr	Pro	Val	Gly	Val	Ala	Gly	Glu	Leu	Leu	Thr	Ile	Tyr	Ala	Ala
	210					215					220				
Leu	Pro	Tyr	Val	Lys	Lys	Thr	Gly	Met	Phe	Ser	Ile	Arg	Leu	Pro	Asn
225					230					235				240	
Lys	Tyr	Asn	Val	Ser	Phe	Asp	Tyr	Tyr	Tyr	Phe	Leu	Leu	Ile	Thr	Met

				245					250					255					
Ala	Ser	Tyr	Ile	Pro	Leu	Phe	Pro	Gln	Leu	Tyr	Phe	His	Met	Leu	Arg				
			260						265					270					
Gln	Arg	Arg	Lys	Val	Leu	His	Gly	Glu	Val	Ile	Val	Glu	Lys	Asp	Asp				
			275				280						285						

&lt;210&gt; 3765

&lt;211&gt; 2764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3765

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180
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1260

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<210> 3766

&lt;211&gt; 464

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3766

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          20           25           30
Arg Arg Arg Arg Gly Pro Ile Gly Arg Val Asn Met Asp Leu Glu Asn
          35           40           45
Lys Val Lys Lys Met Gly Leu Gly His Glu Gln Gly Phe Gly Ala Pro
          50           55           60
Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp
          65           70           75           80
Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val
          85           90           95
Leu Leu Ser Asn Glu Glu Asp Arg Lys Val Gly Lys Leu Phe Glu Asp
          100          105          110
Thr Lys Tyr Thr Thr Leu Ile Ala Lys Leu Lys Ser Asp Gly Ile Pro
          115          120          125
Met Tyr Lys Arg Asn Val Met Ile Leu Thr Asn Pro Val Ala Ala Lys
          130          135          140
Lys Asn Val Ser Ile Asn Thr Val Thr Tyr Glu Trp Ala Pro Pro Val
          145          150          155          160
Gln Asn Gln Ala Leu Ala Arg Gln Tyr Met Gln Met Leu Pro Lys Glu
          165          170          175
Lys Gln Pro Val Ala Gly Ser Glu Gly Ala Gln Tyr Arg Lys Lys Gln
          180          185          190
Leu Ala Lys Gln Leu Pro Ala His Asp Gln Asp Pro Ser Lys Cys His
          195          200          205
Glu Leu Ser Pro Arg Glu Val Lys Glu Met Glu Gln Phe Val Lys Lys
          210          215          220
Tyr Lys Ser Glu Ala Leu Gly Val Gly Asp Val Lys Leu Pro Cys Glu
          225          230          235          240
Met Asp Ala Gln Gly Pro Lys Gln Met Asn Ile Pro Gly Gly Asp Arg
          245          250          255
Ser Thr Pro Ala Ala Val Gly Ala Met Glu Asp Lys Ser Ala Glu His
          260          265          270
Lys Arg Thr Gln Tyr Ser Cys Tyr Cys Cys Lys Leu Ser Met Lys Glu
          275          280          285
Gly Asp Pro Ala Ile Tyr Ala Glu Arg Ala Gly Tyr Asp Lys Leu Trp
          290          295          300
His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp
          305          310          315          320
Met Ile Tyr Phe Trp Lys Asn Glu Lys Leu Tyr Cys Gly Arg His Tyr
          325          330          335
Cys Asp Ser Glu Lys Pro Arg Cys Ala Gly Cys Asp Glu Leu Ile Phe
          340          345          350
Ser Asn Glu Tyr Thr Gln Ala Glu Asn Gln Asn Trp His Leu Lys His
          355          360          365
Phe Cys Cys Phe Asp Cys Asp Ser Ile Leu Ala Gly Glu Ile Tyr Val
          370          375          380
Met Val Asn Asp Lys Pro Val Cys Lys Pro Cys Tyr Val Lys Asn His

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385					390					395				400	
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				405					410					415	
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				420				425					430		
Leu	Cys	Ser	Cys	Cys	Ser	Lys	Cys	Leu	Ile	Gly	Gln	Lys	Phe	Met	Pro
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&lt;210&gt; 3767

&lt;211&gt; 2439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

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&lt;210&gt; 3768

&lt;211&gt; 379

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3768

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Ser	Cys	Arg	Asn	Trp	Arg	Ala	Ala	Val	Asp	Leu	Cys	Gly	Arg	Leu	Leu		
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Thr	Ala	His	Gly	Gln	Gly	Tyr	Gly	Lys	Ser	Gly	Leu	Leu	Thr	Ser	His		
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Thr	Thr	Asp	Ser	Leu	Gln	Leu	Trp	Phe	Val	Arg	Leu	Ala	Leu	Leu	Val		
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Lys	Leu	Gly	Leu	Phe	Gln	Asn	Ala	Glu	Met	Glu	Phe	Glu	Pro	Phe	Gly		
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Asn	Leu	Asp	Gln	Pro	Asp	Leu	Tyr	Tyr	Glu	Tyr	Tyr	Pro	His	Val	Tyr		
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Pro	Gly	Arg	Arg	Gly	Ser	Met	Val	Pro	Phe	Ser	Met	Arg	Ile	Leu	His		
	115						120					125					
Ala	Glu	Leu	Gln	Gln	Tyr	Leu	Gly	Asn	Pro	Gln	Glu	Ser	Leu	Asp	Arg		
	130					135				140							
Leu	His	Lys	Val	Lys	Thr	Val	Cys	Ser	Lys	Ile	Leu	Ala	Asn	Leu	Glu		
145					150					155					160		
Gln	Gly	Leu	Ala	Glu	Asp	Gly	Gly	Met	Ser	Ser	Val	Thr	Gln	Glu	Gly		
			165					170					175				
Arg	Gln	Ala	Ser	Ile	Arg	Leu	Trp	Arg	Ser	Arg	Leu	Gly	Arg	Val	Met		
		180						185					190				
Tyr	Ser	Met	Ala	Asn	Cys	Leu	Leu	Leu	Met	Lys	Asp	Tyr	Val	Leu	Ala		
	195					200					205						
Val	Glu	Ala	Tyr	His	Ser	Val	Ile	Lys	Tyr	Tyr	Pro	Glu	Gln	Glu	Pro		
	210					215					220						
Gln	Leu	Leu	Ser	Gly	Ile	Gly	Arg	Ile	Ser	Leu	Gln	Ile	Gly	Asp	Ile		
225					230					235					240		
Lys	Thr	Ala	Glu	Lys	Tyr	Phe	Gln	Asp	Val	Glu	Lys	Val	Thr	Gln	Lys		
			245					250					255				
Leu	Asp	Gly	Leu	Gln	Gly	Lys	Ile	Met	Val	Leu	Met	Asn	Ser	Ala	Phe		
	260							265					270				
Leu	His	Leu	Gly	Gln	Asn	Asn	Phe	Ala	Glu	Ala	His	Arg	Phe	Phe	Thr		
	275						280					285					
Glu	Ile	Leu	Arg	Met	Asp	Pro	Arg	Asn	Ala	Val	Ala	Asn	Asn	Asn	Ala		
	290					295					300						
Ala	Val	Cys	Leu	Leu	Tyr	Leu	Gly	Lys	Leu	Lys	Asp	Ser	Leu	Arg	Gln		
305					310					315					320		
Leu	Glu	Ala	Met	Val	Gln	Gln	Asp	Pro	Arg	His	Tyr	Leu	His	Glu	Ser		
			325					330					335				
Val	Leu	Phe	Asn	Leu	Thr	Thr	Met	Tyr	Glu	Leu	Glu	Ser	Ser	Arg	Ser		
			340					345					350				
Met	Gln	Lys	Lys	Gln	Ala	Leu	Leu	Glu	Ala	Val	Ala	Gly	Lys	Glu	Gly		
	355					360					365						
Asp	Ser	Phe	Asn	Thr	Gln	Cys	Leu	Lys	Leu	Ala							
	370					375											

&lt;210&gt; 3769

&lt;211&gt; 1931

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3769

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300  
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 1800  
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 1931

<210> 3770

<211> 447

<212> PRT

<213> Homo sapiens

<400> 3770

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Cys	Gln	Glu	Gln	Phe	Asp	Ile	Asp	Glu	Tyr	Ser	Arg	Ala	Val	Arg	Asp
			20					25					30		
Val	Lys	Thr	Asp	Trp	Asn	Glu	Glu	Cys	Lys	Ser	Pro	Lys	Lys	Gly	Arg
		35					40					45			
Cys	Ser	Gly	His	Asn	His	Val	Pro	Asn	Ser	Leu	Ser	Tyr	Ala	Arg	Asp
	50				55						60				
Glu	Leu	Thr	Gln	Ser	Phe	His	Arg	Leu	Ser	Val	Cys	Val	Tyr	Gly	Asn
65					70					75					80
Asn	Leu	His	Gly	Asn	Ser	Glu	Val	Asn	Leu	His	Gly	Cys	Arg	Asp	Leu
				85					90					95	
Gly	Gly	Asp	Trp	Ala	Pro	Phe	Pro	His	Asp	Ile	Leu	Pro	Tyr	Gln	Asp
			100					105						110	
Ser	Gly	Asp	Ser	Gly	Ser	Asp	Tyr	Leu	Phe	Pro	Glu	Ala	Ser	Glu	Glu
	115						120					125			
Ser	Ala	Gly	Ile	Pro	Gly	Lys	Ser	Glu	Leu	Pro	Tyr	Glu	Glu	Leu	Trp
	130					135					140				
Leu	Glu	Glu	Gly	Lys	Pro	Ser	His	Gln	Pro	Leu	Thr	Arg	Ser	Leu	Ser
145					150					155					160
Glu	Lys	Asn	Arg	Cys	Asp	Gln	Phe	Arg	Gly	Ser	Val	Arg	Ser	Lys	Cys
				165					170					175	
Ala	Thr	Ser	Pro	Leu	Pro	Ile	Pro	Gly	Thr	Leu	Gly	Ala	Ala	Val	Lys
			180					185					190		
Ser	Ser	Asp	Thr	Ala	Leu	Pro	Pro	Pro	Pro	Val	Pro	Pro	Lys	Ser	Glu
		195					200					205			
Ala	Val	Arg	Glu	Glu	Cys	Arg	Leu	Leu	Asn	Ala	Pro	Pro	Val	Pro	Pro
	210					215					220				
Arg	Ser	Ala	Lys	Pro	Leu	Ser	Thr	Ser	Pro	Ser	Ile	Pro	Pro	Arg	Thr
225					230					235					240
Val	Lys	Pro	Ala	Arg	Gln	Gln	Thr	Arg	Ser	Pro	Ser	Pro	Thr	Leu	Ser
				245						250				255	
Tyr	Tyr	Ser	Ser	Gly	Leu	His	Asn	Ile	Val	Thr	Lys	Thr	Asp	Thr	Asn
			260					265					270		
Pro	Ser	Glu	Ser	Thr	Pro	Val	Ser	Cys	Tyr	Pro	Cys	Asn	Arg	Val	Lys
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Thr	Asp	Ser	Val	Asp	Leu	Lys	Ser	Pro	Phe	Gly	Ser	Pro	Ser	Ala	Glu

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Ser Tyr Pro Arg Gln Lys Thr Pro Gly Thr Pro Lys Arg Asn Cys Pro
      340              345              350
Ala Pro Phe Asp Phe Asp Gly Cys Glu Leu Leu Ala Ser Pro Thr Ser
      355              360              365
Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser Gly Cys Pro Lys Ser
      370              375              380
Ala Ser Tyr Ser Leu Glu Ser Thr Asp Val Lys Ser Leu Ala Ala Gly
385              390              395              400
Val Thr Lys Gln Ser Thr Ser Cys Pro Ala Leu Pro Pro Arg Ala Pro
      405              410              415
Lys Leu Val Glu Glu Lys Val Ala Ser Glu Thr Ser Pro Leu Pro Leu
      420              425              430
Lys Ile Asp Gly Ala Glu Glu Asp Pro Lys Ser Gly Ser Pro Asp
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&lt;210&gt; 3771

&lt;211&gt; 1514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3771

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&lt;210&gt; 3772

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3772

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Thr	Leu	Gln	His	Trp	Pro	His	Ile	Ile	Arg	Ile	Gly	Asp	Leu	Lys	Pro
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Thr	Ser	Glu	Ile	Pro	Lys	Gln	Val	Lys	Val	Lys	Lys	Leu	Lys	Asn	Leu
	50				55					60					
Lys	Thr	Leu	Asp	Ser	Lys	Pro	Gly	Val	Tyr	Thr	Ser	Tyr	Lys	Pro	Tyr
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Leu	Asn	Arg	Asp	Glu	Glu	Ile	Ile	Lys	Gln	Leu	Gln	Lys	Gly	Val	Gln
			85					90						95	
Gln	Lys	Arg	Pro	Ser	Glu	Ala	Gln	Ser	Val	Ile	Leu	Arg	Arg	Tyr	Phe
			100					105					110		
Leu	Glu	Leu	Thr	Gln	Ser	Phe	Ile	Ile	Pro	Leu	Glu	Arg	Tyr	Val	Ala
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Ser	Leu	Met	Pro	Leu	Gln	Lys	Ser	Ile	Ser	Pro	Trp	Lys	Ser	Pro	Pro
	130				135					140					
Gln	Leu	Arg	Gln	Phe	Leu	Pro	Glu	Glu	Phe	Met	Lys	Thr	Leu	Glu	Lys
145					150				155					160	
Thr	Gly	Pro	Gln	Leu	Thr	Ser	Arg	Ile	Lys	Gly	Asp	Trp	Ile	Gly	Leu
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Tyr	Arg	His	Phe	Leu	Lys	Ser	Pro	Asn	Phe	Asp	Gly	Trp	Phe	Lys	Thr

<400> 3773

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<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3775

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<213> Homo sapiens

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 <211> 1049  
 <212> PRT  
 <213> Homo sapiens

<400> 3778

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Asn	Thr	Val	Gln	Glu	Lys	Thr	Phe	Asn	Lys	Asp	Thr	Val	Ile	Ile	Val
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Ser	Glu	Pro	Ser	Glu	Asp	Glu	Glu	Ser	Gln	Gly	Leu	Pro	Thr	Met	Ala
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Asp	Leu	Lys	Asp	Ala	Lys	Leu	Gln	Thr	Leu	Lys	Glu	Leu	Phe	Pro	Gln
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Arg	Ser	Asp	Asn	Asp	Leu	Leu	Lys	Leu	Ile	Glu	Ser	Thr	Ser	Thr	Met
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Asp	Gly	Ala	Ile	Ala	Ala	Ala	Leu	Leu	Met	Phe	Gly	Asp	Ala	Gly	Gly
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Asp	Glu	Phe	Asn	Asp	Asp	Gln	Ser	Ile	Lys	Lys	Thr	Arg	Leu	Asp	His
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Gly	Glu	Glu	Ser	Asn	Glu	Ser	Ala	Glu	Ser	Ser	Ser	Asn	Trp	Glu	Lys
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Gln	Glu	Ser	Ile	Val	Leu	Lys	Leu	Gln	Lys	Glu	Phe	Pro	Asn	Phe	Asp
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Glu	Ala	Leu	Glu	Ser	Leu	Lys	Val	Phe	Ala	Glu	Asp	Gln	Asp	Met	Gln
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Tyr	Ala	Ser	Gln	Ser	Glu	Val	Pro	Asn	Gly	Lys	Glu	Val	Ser	Ser	Arg
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Ser	Gln	Asn	Tyr	Pro	Lys	Asn	Ala	Thr	Lys	Thr	Lys	Leu	Lys	Gln	Lys
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Ala Ser Ile Gly Glu Leu Thr Leu Ile Pro Gln Cys Ser Gln Lys Lys				
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Phe Thr Lys Met Ser Lys Thr Asn Gly Leu Ser Glu Asp Leu Ile Trp				
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His Cys Lys Thr Leu Ile Gln Glu Arg Asp Val Val Ile Arg Leu Met				
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Tyr Gln Glu Gly Asn Asn Gly Pro His Leu Ile Val Val Pro Ala Ser				
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Thr Ile Asp Asn Trp Leu Arg Glu Val Asn Leu Trp Cys Pro Thr Leu				
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Lys Val Leu Cys Tyr Tyr Gly Ser Gln Glu Glu Arg Lys Gln Ile Arg				
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr				
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Tyr Asn Cys Ala Ile Ser Ser Ser Asp Asp Arg Ser Leu Phe Arg Arg				
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Leu Lys Leu Asn Tyr Ala Ile Phe Asp Glu Gly His Met Leu Lys Asn				
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Met Gly Ser Ile Arg Tyr Gln His Leu Met Thr Ile Asn Ala Asn Asn				
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Arg Leu Leu Leu Thr Gly Thr Pro Val Gln Asn Asn Leu Leu Glu Leu				
	675		680	685
Met Ser Leu Leu Asn Phe Val Met Pro His Met Phe Ser Ser Ser Thr				
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Ser Glu Ile Arg Arg Met Phe Ser Ser Lys Thr Lys Ser Ala Asp Glu				
705		710		715
Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile				
	725		730	735
Lys Pro Phe Ile Leu Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu				
	740		745	750
Pro Pro Lys Lys Asp Arg Ile Glu Leu Cys Ala Met Ser Glu Arg Gln				
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Glu Gln Leu Tyr Leu Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn				
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Asn Leu Val Thr Glu Lys Asn Thr Glu Met Cys Asn Val Met Met Gln				
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<211> 1853
<212> DNA
<213> Homo sapiens
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480
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1853

&lt;210&gt; 3780

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3780

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			20					25					30				
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Ser	His	Asp	Arg	Arg	His	Glu	Gly	Arg	Glu	Asp	Thr	Arg	Gly	Lys	Arg		
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Thr	Lys	Glu	Ser	Arg	Asp	Pro	Arg	Asp	Ser	Arg	Ser	Thr	Arg	Asp	Ala		
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His	Asp	Tyr	Arg	Asp	Arg	Glu	Gly	Arg	Asp	Thr	His	Arg	Lys	Glu	Asp		
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 Glu Leu Pro Glu Lys Gly Ser Arg Gly Ser Arg Gly Ser Gln Ile Asp  
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 Ser Tyr Pro Glu Arg Asp Arg Tyr Pro Glu Arg Asp Asn Arg Asp Gln  
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<212> DNA

<213> Homo sapiens

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<211> 112

<212> PRT

<213> Homo sapiens

<400> 3782

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Asp	Leu	Gln	Asp	Ser	Ser	Glu	Leu	His	Pro	Glu	Phe	Ala	Lys	Cys	His
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Val	Pro	Trp	Thr	Pro	Arg	Phe	Ala	Tyr	Gly	Val	Phe	Tyr	Ala	Asp	Pro
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Cys	Thr	Gly	Gly	Asp	Ser	Tyr	His	Pro	His	Glu	Gln	Ser	Ser	Pro	Pro
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Ile	Phe	Ser	Lys	Gln	Ser	Trp	Ala	Leu	Thr	Pro	Leu	Glu	Arg	Gly	Arg
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<212> DNA

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<210> 3784

<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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2931

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&lt;211&gt; 1901

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3785

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&lt;210&gt; 3786

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3786

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His	Phe	Ser	Arg	Leu	Pro	Leu	Gly	Gly	Trp	Ala	Glu	Asp	Gly	Gln	Ser		
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&lt;211&gt; 717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3787

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&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3788

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		20					25					30					
Pro	Trp	Gly	Ala	Lys	Cys	Ser	Trp	Arg	Gln	Val	Ala	Lys	Gly	Glu	His		
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Ala	Ala	Val	Ile	Thr	His	Glu	Gln	Cys	Leu	Ala	Gln	Ser	Gly	Arg	Ser
				85					90					95	
Ala	Val	Leu	Val	His	Met	Glu	Glu	Pro	Lys	Gln	Ala	Pro	Cys	Thr	Val
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Leu															

&lt;210&gt; 3789

&lt;211&gt; 4341

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3789

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 <211> 1092  
 <212> PRT  
 <213> Homo sapiens

<400> 3790

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Leu	Gln	Val	Leu	Lys	Ala	Gln	Ser	Glu	Asp	Pro	Leu	Pro	Glu	Leu	His
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Glu	Asp	Leu	His	Asn	Glu	Lys	Glu	Leu	Ile	Lys	Glu	Leu	Glu	Gln	Ser
	50				55					60					
Leu	Ala	Ser	Trp	Thr	Gln	Asn	Leu	Lys	Glu	Leu	Gln	Thr	Met	Lys	Ala
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			85					90					95		
Gln	Ile	Glu	His	Leu	His	Arg	Gln	Trp	Glu	Asp	Leu	Cys	Leu	Arg	Val
			100				105					110			
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Asn	Lys	Val	Leu	Gln	Thr	Val	Asp	Ile	Ser	Ile	Glu	Glu	Met	Ile	Glu
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Lys	Leu	Gln	Lys	Asp	Cys	Met	Glu	Glu	Ile	Asn	Leu	Phe	Ser	Glu	Asn
			165					170					175		
Lys	Leu	Gln	Leu	Lys	Gln	Met	Gly	Asp	Gln	Leu	Ile	Lys	Ala	Ser	Asn
		180					185					190			
Lys	Ser	Arg	Ala	Ala	Glu	Ile	Asp	Asp	Lys	Leu	Asn	Lys	Ile	Asn	Asp
	195						200				205				
Arg	Trp	Gln	His	Leu	Phe	Asp	Val	Ile	Gly	Ser	Arg	Val	Lys	Lys	Leu
	210					215					220				
Lys	Glu	Thr	Phe	Ala	Phe	Ile	Gln	Gln	Leu	Asp	Lys	Asn	Met	Ser	Asn
225				230					235					240	
Leu	Arg	Thr	Trp	Leu	Ala	Arg	Ile	Glu	Ser	Glu	Leu	Ser	Lys	Pro	Val
			245					250					255		
Val	Tyr	Asp	Val	Cys	Asp	Asp	Gln	Glu	Ile	Gln	Lys	Arg	Leu	Ala	Glu
		260					265						270		
Gln	Gln	Asp	Leu	Gln	Arg	Asp	Ile	Glu	Gln	His	Ser	Ala	Gly	Val	Glu
		275					280					285			
Ser	Val	Phe	Asn	Ile	Cys	Asp	Val	Leu	Leu	His	Asp	Ser	Asp	Ala	Cys
	290				295					300					
Ala	Asn	Glu	Thr	Glu	Cys	Asp	Ser	Ile	Gln	Gln	Thr	Thr	Arg	Ser	Leu
305					310				315					320	
Asp	Arg	Arg	Trp	Arg	Asn	Ile	Cys	Ala	Met	Ser	Met	Glu	Arg	Arg	Met
			325					330				335			
Lys	Ile	Glu	Glu	Thr	Trp	Arg	Leu	Trp	Gln	Lys	Phe	Leu	Asp	Asp	Tyr
		340					345					350			
Ser	Arg	Phe	Glu	Asp	Trp	Leu	Lys	Ser	Ala	Glu	Arg	Thr	Ala	Ala	Cys
	355					360					365				
Pro	Asn	Ser	Ser	Glu	Val	Leu	Tyr	Thr	Ser	Ala	Lys	Glu	Glu	Leu	Lys

2939

[illegible]

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<210> 3791
<211> 1011
<212> DNA
<213> Homo sapiens
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<400> 3791
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120
tgaaccttct ttaaacattt agcctcttcc tcctcctgct tttcccgagc tttccgttcc
180
tcttcctcct tccggcaagc aacttcctca ggtgactctg ccctttgatc cattggaata
240
tcctgtccca gagacatagc aattgctctc atcatctggt cctcttcaga catgctgaga
300
```

tcccgaacaa ctctcccat gattggagga ggggtgggta aaaggtactc tgtggcctgc  
 360  
 tccatgggtgc tgggtgttcaa cagtgcctcc attgcatgtt cccttgtgaa gcccattgtcc  
 420  
 atgagctgtt gcagttgttg ctggttgact tgaggttccc ggcgggagcc accttctct  
 480  
 tgccctgtat cctcttctcc tcgagacccc tccttctcct tgcttagtct ctctcgaatc  
 540  
 acaggttctc ctcgaggat gtggcataga atggccagca tcgattcagc cattcgtcca  
 600  
 ccatatacct tcaggggttt ccggttccat aagtttttga tgcaagtaaa ggctgctttc  
 660  
 tgagttacca caaggaagcg cagtgcactg aactggggaa agttctggac acctccaggc  
 720  
 aatttggcag gcagcgaatg tggagattca agcaccgtgg tgggattcac catcttctcc  
 780  
 accagcataa gccaggcatc taggaattct cctgtgccat caggcaagtc tgagtgttcc  
 840  
 aatccctcag aaacaggaac tttacctccc atggacagag cccagttgaa agtttcaaaa  
 900  
 agagcattgt ggcctccgga gcagagaaat ttttgcagca tgaggtggta gggatacttc  
 960  
 ctctcatcaa acagcattgg ggatgtgaaa ccaactgaac agatgaagaa t  
 1011

&lt;210&gt; 3792

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3792

Met	Leu	Phe	Asp	Glu	Arg	Lys	Tyr	Pro	Tyr	His	Leu	Met	Leu	Gln	Lys
1				5					10					15	
Phe	Leu	Cys	Ser	Gly	Gly	His	Asn	Ala	Leu	Phe	Glu	Thr	Phe	Asn	Trp
			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
			35				40					45			
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
			50			55					60				
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
					70					75				80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
				85					90					95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
			100					105					110		
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
		115					120					125			
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
	130					135					140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
	145				150					155				160	
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
				165				170					175		
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

			180					185					190				
Glu	His	Ala	Met	Glu	Ala	Leu	Leu	Asn	Thr	Ser	Thr	Met	Glu	Gln	Ala		
		195						200				205					
Thr	Glu	Tyr	Leu	Leu	Thr	His	Pro	Pro	Pro	Ile	Met	Gly	Gly	Val	Val		
	210					215					220						
Arg	Asp	Leu	Ser	Met	Ser	Glu	Glu	Asp	Gln	Met	Met	Arg	Ala	Ile	Ala		
225					230					235					240		
Met	Ser	Leu	Gly	Gln	Asp	Ile	Pro	Met	Asp	Gln	Arg	Ala	Glu	Ser	Pro		
			245						250					255			
Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu		
		260						265					270				
Lys	Gln	Glu	Glu	Glu	Glu	Ala	Lys	Cys	Leu	Lys	Lys	Val	Gln	Gly	Cys		
	275						280					285					

&lt;210&gt; 3793

&lt;211&gt; 360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3793

```

nnnatctgcc cacacttata tatgtgagtg tacacacaca cagagtgtgt gtgtgtgtgt
60
gtgtgtgtgt gtgtgtgtgt atttatatatt cagatcacag gcagatttct gggctctctgt
120
tactttgtgc cgggtaggaa caacagtttc tttttttctt ggagacagtg tttcactctt
180
gttgcccagg ctggagggca atggcgcgat ctcagctcac tgcaacctcc gcctttcggg
240
ctcaagagat tctcctgcct cagcctccca agtagctggg attacaggca tgcacacca
300
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360

```

&lt;210&gt; 3794

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3794

Val	Tyr	Thr	His	Thr	Glu	Cys	Val	Cys	Val	Cys	Val	Cys	Val	Cys	Val		
1				5				10					15				
Cys	Val	Phe	Ile	Phe	Gln	Ile	Thr	Gly	Arg	Phe	Leu	Gly	Leu	Cys	Tyr		
		20						25				30					
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys		
	35					40						45					
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser		
	50					55				60							
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu		
65					70				75					80			
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp		
			85					90					95				

&lt;210&gt; 3795

&lt;211&gt; 1341

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3795

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60  
cgcaactaca ggtctcatcc caccatcctg gacattccta accagctcta ttatgaaggg  
120  
gagctgcagg cctgtgctga tgctgtggat cgagaacgct tctgccgctg ggcgggccta  
180  
cctcgacagg gctttcccat catctttcac ggcgtaatgg gcaaagatga gcgtaagggc  
240  
aacagcccat ccttcttcaa ccctgaagag gctgccacag tgacttcta cctgaagctg  
300  
ctcctggccc cctcctccaa gaagggcaaa gccgcctga gccctcgaag tgtgggcgtc  
360  
atctccccgt accggaaaca ggtggagaaa atccgttact gcatcaccaa acttgacagg  
420  
gagcttcgag gactggatga catcaaggac ttgaagggtg gttcagtaga agaattccaa  
480  
ggccaagaac gaagcgtcat cctcatctcc accgtgcgaa gcagccagag ctttgtgcag  
540  
ctggatctgg actttaatct gggtttcctt aagaacccca agaggttcaa tgtagctgtg  
600  
accggggcca aggccctgct catcatcgtg gggaaccccc ttctcctggg ccatgaccct  
660  
gactggaaag tattcctgga gttctgtaaa gaaaacggag ggtataccgg gtgtcccttc  
720  
cctgccaaac tggacctgca acagggacag aatttactgc aaggtctgag caagctcagc  
780  
ccctctacct cagggcccca cagccatgac tacctcccc aggagcggga gggatgaaggg  
840  
ggcctgtctc tgcaagtgga gccagagtgg aggaatgagc tctgaagaca cagcaccag  
900  
ccttctcgca ccagccaagc cttaactgcc tgctgaccc tgaaccagaa ccagctgaa  
960  
ctgccccctc aagggacagg aaggctgggg gagggagttt acaacccaag ccattccacc  
1020  
ccctccccctg ctggggagaa tgacacatca agctgctaac aattggggga aggggaagga  
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agaaaactct gaaaacaaaa tcttgttcta tgcaaaagcc ttgataatgt ctctctgcc  
1140  
tgccccagc ttctgagcc cctaagctga ccctgtaggg aagggtggga ctttcagccc  
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1260  
aaaccagtg ggaggtggca gggaagccac ccacaggttt ctaagtttag cccctgcta  
1320  
cagaccactc ccttcacgcg t  
1341

&lt;210&gt; 3796

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3796

```

Asn Cys Leu Tyr Lys Lys Gly Pro Asp Gly Tyr Asp Pro Gln Phe Ile
 1           5           10           15
Thr Lys Leu Leu Arg Asn Tyr Arg Ser His Pro Thr Ile Leu Asp Ile
          20           25           30
Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
          35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
          50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65           70           75           80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
          85           90           95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
          100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
          115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
          130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
          165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
          180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
          195          200          205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
          210          215          220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
          245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
          260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
          275          280          285
Glu Trp Arg Asn Glu Leu
          290

```

&lt;210&gt; 3797

&lt;211&gt; 1970

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3797

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nnggaaccgc cgcgtgccag cccggccagg cacccttgca gcatggcctg gaacaccaac
60
ctccgctggc ggctgccgct cacctgcctg ctctgcagg tgattatggt gattctcttc
120
ggggtgttcg tgcgctacga ctctgaggcc gacgccact ggtggtcaga gaggacgcac
180

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aagaacttga gcgacatgga gaacgaattc tactatcgct acccaagctt ccaggacgtg  
240  
cacgtgatgg tcttcgtggg cttcggttc ctcagtactt tctgcagcg ctacggcttc  
300  
agcgccgtgg gcttcaactt cctgttgga gccttcggca tccagtgggc gctgctcatg  
360  
cagggctggt tccacttctt acaagaccgc tacatcgctg tgggcgtgga gaacctcatc  
420  
aacgctgact tctgcgtggc ctctgtctgc gtggcctttg gggcagttct gggtaaagtc  
480  
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660  
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720  
ttcctgtgga tgtactggcc cagcttcaac tcagccatat cctaccatgg ggacagccag  
780  
caccgagccg ccatcaaac ctactgctcc ttggcagcct gcgtgcttac ctcggtggca  
840  
atatccagtg cctgcacaa gaagggaag ctggacatgg tgcacatcca gaatgccacg  
900  
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960  
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1080  
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1140  
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1200  
gcaagaacac agggaaagt ccagatttat ggtctcttgg tgaccctggc catggccctg  
1260  
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1320  
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1380  
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1440  
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1500  
gagcaggctc cacagactgt cctggggccc agaggagctg gtgctgacct agctagggat  
1560  
gcaagagtga gcaagcagca cccccacctg ctggcttggc ctcaaggtgc ctccaccct  
1620  
gccctccct tcatcccagg gggctctgct gagaatggag aaggagaagc taaaagtgg  
1680  
gcatccaagc cgggttctgg ctgcagaagt tctgcctctg cctggggctt tggccacatt  
1740  
ggagaaaaac aggcctcaaag tggggctggg acctgggtgg tgaacctgag ctctccagg  
1800

agacaactta gctgccagtc accacctatg aggctcttct accccgtgcc tgcacctcgg  
 1860  
 ccagcatctc ctatgctccc tgggtccccc agacctctct gtgttggtgtg cgtggcagcc  
 1920  
 tccaggaata aacattcttg ttgtcctttg taaaaaaaaa aaaaaaaaaa  
 1970

<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

Leu	Arg	Trp	Arg	Leu	Pro	Leu	Thr	Cys	Leu	Leu	Leu	Gln	Val	Ile	Met
1				5					10					15	
Val	Ile	Leu	Phe	Gly	Val	Phe	Val	Arg	Tyr	Asp	Phe	Glu	Ala	Asp	Ala
			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
			35				40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
			50			55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75				80	
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
		115				120						125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
		130				135					140				
Leu	Leu	Ile	Met	Thr	Phe	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu
145					150					155				160	
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
			180					185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
		195				200						205			
Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
	210				215						220				
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
225					230					235				240	
His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
				245					250					255	
Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
			260					265					270		
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
		275					280					285			
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
	290					295					300				
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
305					310					315				320	
Phe	Leu	Glu	Ser	Arg	Leu	His	Ile	Gln	Asp	Thr	Cys	Gly	Ile	Asn	Asn

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          325          330          335
Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr
          340          345          350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His
          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
          435          440          445
Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
          450          455          460
Met Ala Ser Ser Val Pro Leu Val Pro
465          470

```

&lt;210&gt; 3799

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3799

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tcgaggaact gctcggcctc cacatcccaa gcctcacctt ctccctgcat cacagagaga
60
agcaagcaga aggcccggag gagaacaaga tccagctcct cctcctcttc ttccagttct
120
tctagctcct cttcttcttc ctcgtctctc tctcttctc ccagtgatgg ccggaagaag
180
cgggggaagt acaaggacaa gaggaggaag
210

```

&lt;210&gt; 3800

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3800

```

Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Ala Ser Pro Ser Pro Cys
1          5          10          15
Ile Thr Glu Arg Ser Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser
20          25          30
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
35          40          45
Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr
50          55          60
Lys Asp Lys Arg Arg Lys
65          70

```

&lt;210&gt; 3801

&lt;211&gt; 4070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3801

ngctagccccg gcggcaagca ctgacgtgtc tctcggcgga gctgctgtgc agtggaacgc  
60  
gctggggccgc gggcagcgtc gcctcacgcg gagcagagct gagctgaagc gggacccgga  
120  
gcccagagcag ccgcccgcct ggcaatcaaa tttctggaag tcatcaagcc cttctgtgtc  
180  
atcctgccgg aaattcagaa gccagagagg aagattcagt ttaaggagaa agtgctgtgg  
240  
accgctatca ccctctttat cttcttagtg tgctgccaga ttcccctggt tgggatcatg  
300  
tcttcagatt cagctgaccc tttctattgg atgagagtga ttctagcctc taacagaggc  
360  
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420  
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&lt;210&gt; 3802

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3802

Met	Ala	Ile	Lys	Phe	Leu	Glu	Val	Ile	Lys	Pro	Phe	Cys	Val	Ile	Leu
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Pro	Glu	Ile	Gln	Lys	Pro	Glu	Arg	Lys	Ile	Gln	Phe	Lys	Glu	Lys	Val
			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
		35					40					45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
	50					55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65				70					75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105					110		
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

115	120	125
Ile Val Tyr Val Met Thr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly		
130	135	140
Ala Gly Ile Cys Leu Leu Ile Ile Ile Gln Leu Phe Val Ala Gly Leu		
145	150	155
Ile Val Leu Leu Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly		160
	165	170
Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val		175
	180	185
Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu		190
	195	200
Phe Glu Gly Ala Val Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr		205
	210	215
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro		220
225	230	235
Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile		240
	245	250
Tyr Phe Gln Gly Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr		255
	260	265
Arg Gly Gln Tyr Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn		270
	275	280
Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile		285
	290	295
Ser Gln Met Leu Ser Ala Arg Phe Ser Gly Asn Phe Leu Val Asn Leu		300
305	310	315
Leu Gly Gln Trp Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr		320
	325	330
Pro Val Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly		335
	340	345
Ser Val Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met		350
	355	360
Leu Gly Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly		365
	370	375
Ser Ser Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val		380
385	390	395
Met Arg Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr		400
	405	410
Ile Pro Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser		415
	420	425
Val Leu Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu		430
	435	440
Leu Ala Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu		445
	450	455
Gln Ser Glu Val Gly Ser Met Gly Ala Leu Leu Phe		460
465	470	475

&lt;210&gt; 3803

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3803

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 240  
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<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

Pro	Arg	Gly	Asn	Ser	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Thr	Gly	Ala	Lys
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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
	50				55					60					
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70					75				80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85					90						95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
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Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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&lt;210&gt; 3806

<211> 280  
 <212> PRT  
 <213> Homo sapiens

<400> 3806

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Asp	Lys	Ser	Pro	Leu	Pro	Thr	Arg	Cys	Gln	Ala	Leu	Cys	Phe	Leu	Leu
			20					25					30		
Pro	Leu	Arg	Phe	Trp	Leu	Val	Ile	Asn	Gln	Glu	Gly	Asn	Met	Val	Thr
		35					40					45			
Ala	Arg	Gln	Glu	Pro	Arg	Leu	Val	Leu	Ile	Ser	Leu	Thr	Cys	Asp	Gly
	50					55					60				
Asp	Thr	Leu	Thr	Leu	Ser	Ala	Ala	Tyr	Thr	Lys	Asp	Leu	Leu	Leu	Pro
65					70					75					80
Ile	Lys	Thr	Pro	Thr	Thr	Asn	Ala	Val	His	Lys	Cys	Arg	Val	His	Gly
				85					90					95	
Leu	Glu	Ile	Glu	Gly	Arg	Asp	Cys	Gly	Glu	Ala	Ala	Ala	Gln	Trp	Ile
			100					105					110		
Thr	Ser	Phe	Leu	Lys	Ser	Gln	Pro	Tyr	Arg	Leu	Val	His	Phe	Glu	Pro
		115					120					125			
His	Met	Arg	Pro	Arg	Arg	Pro	His	Gln	Ile	Ala	Asp	Leu	Phe	Arg	Pro
	130					135					140				
Lys	Asp	Gln	Ile	Ala	Tyr	Ser	Asp	Thr	Ser	Pro	Phe	Leu	Ile	Leu	Ser
145					150					155					160
Glu	Ala	Ser	Leu	Ala	Asp	Leu	Asn	Ser	Arg	Leu	Glu	Lys	Lys	Val	Lys
			165						170					175	
Ala	Thr	Asn	Phe	Arg	Pro	Asn	Ile	Val	Ile	Ser	Gly	Cys	Asp	Val	Tyr
			180					185					190		
Ala	Glu	Asp	Ser	Trp	Asp	Glu	Leu	Leu	Ile	Gly	Asp	Val	Glu	Leu	Lys
	195						200					205			
Arg	Val	Met	Ala	Cys	Ser	Arg	Cys	Ile	Leu	Thr	Thr	Val	Asp	Pro	Asp
	210					215						220			
Thr	Gly	Val	Met	Ser	Arg	Lys	Glu	Pro	Leu	Glu	Thr	Leu	Lys	Ser	Tyr
225					230					235					240
Arg	Gln	Cys	Asp	Pro	Ser	Glu	Arg	Lys	Leu	Tyr	Gly	Lys	Ser	Pro	Leu
			245						250					255	
Phe	Gly	Gln	Tyr	Phe	Val	Leu	Glu	Asn	Pro	Gly	Thr	Ile	Lys	Val	Gly
		260						265					270		
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		275					280								

<210> 3807  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<400> 3807

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 180

ccctccccac gctccgcccc tgggtggctg cgctctttct gggccttttc ttttggccc  
 240  
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 372

<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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Arg	Tyr	Pro	Arg	Ala	Val	Ile	Val	Pro	Tyr	Leu	Val	Asp	Asp	Asp	Ala
			20					25					30		
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
			35				40					45			
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
	50					55					60				
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
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Gly	Gln	Phe	Ala	Ala											
					85										

<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120  
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 180  
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 240  
 aaaacattcc cagctccttc cctccctccc tagtaccaag gtcctcatct cagttttcat  
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<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
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Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50					55					60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
65					70				75					80	
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<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
			20					25					30		
Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
		35					40					45			
Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
	50					55				60					
Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
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<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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			20					25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
		35					40					45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50					55				60					
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65					70				75						80
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
			85					90					95		
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			100					105					110		
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
		115					120					125			
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Val	Ala	Gly	Pro	Trp	Gly	Pro	Gly	Leu	Val	Gln	Arg	Phe	Arg	Pro	Asp

				165					170					175					
Phe	Lys	Arg	Lys	Phe	Ala	Asp	Phe	Phe	Glu	Asp	Asp	Thr	Ile	Ser	Glu				
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Tyr	Ile	Tyr	His	Cys	Asn	Ala	Gln	Asn	Pro	Ser	Gly	Glu	Thr	Ala	Phe				
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		260					265					270							
His	Val	Tyr	Ala	Asp	Gln	Pro	His	Ile	Phe	Asn	Ala	Val	Val	Glu	Glu				
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	290																		

&lt;210&gt; 3815

&lt;211&gt; 3669

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3815

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&lt;210&gt; 3816

&lt;211&gt; 707

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3816

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			20					25					30		
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2962

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		515					520					525					
Arg	Leu	Lys	Ala	Ala	Glu	Asn	Lys	Phe	Ala	Lys	Cys	Leu	Met	Thr	Cys		
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545					550					555					560		
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			565						570					575			
Ser	Ala	Arg	Asn	Ala	Phe	Phe	Leu	Leu	Met	Arg	Asn	Ile	Ile	Arg	Val		
			580					585						590			
Ala	Val	Leu	Asp	Lys	Val	Thr	Asp	Phe	Leu	Phe	Leu	Leu	Gly	Lys	Leu		
		595					600					605					
Leu	Ile	Val	Gly	Ser	Val	Gly	Ile	Leu	Ala	Phe	Phe	Phe	Phe	Thr	His		
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Arg	Ile	Arg	Ile	Val	Gln	Asp	Thr	Ala	Pro	Pro	Leu	Asn	Tyr	Tyr	Trp		
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Val	Pro	Ile	Leu	Thr	Val	Ile	Val	Gly	Ser	Tyr	Leu	Ile	Ala	His	Gly		
			645					650						655			
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		660				665						670					
Leu	Glu	Asp	Leu	Glu	Arg	Asn	Asp	Gly	Ser	Ala	Glu	Arg	Pro	Tyr	Phe		
	675					680					685						
Met	Ser	Ser	Thr	Leu	Lys	Lys	Leu	Leu	Asn	Lys	Thr	Asn	Lys	Lys	Ala		
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Ala	Glu	Ser															
705																	

&lt;210&gt; 3817

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3817

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&lt;210&gt; 3818

&lt;211&gt; 139

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3818

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Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
          35           40           45
Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
          50           55           60
Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Asp Leu Leu
65           70           75           80
Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
          85           90           95
Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
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<210> 3819

<211> 1731

<212> DNA

<213> Homo sapiens

<400> 3819

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780

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&lt;210&gt; 3820

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3820

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Tyr	Phe	Phe	Thr	Asn	Cys	Ser	Ile	Ser	Phe	Thr	Ser	Leu	Gly	Asp	Asn
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Ser	Trp	His	Phe	Glu	Gly	Ser	Trp	Ser	Cys	Ala	Gly	Ser	Cys	Phe	Ala
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Ser	Cys	Phe	Phe	Arg	Tyr	Cys	Ala	Pro	Ser	Glu	Pro	Ala	Thr	Gly	Arg
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Ser	Ser	Ala	Gly	Phe	Pro	Cys	Ser	Gln	Arg	Ser	Arg	Arg	Pro	Ala	Glu
			100					105					110		
Pro	Gly	Arg	Gly	Ile	Thr	Asp	Arg	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg

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Gly Gln Glu Glu His Asp Val Leu Leu Ser Asn Glu Glu Asp Arg Lys		
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Val Gly Lys Leu Phe Glu Asp Thr Lys Tyr Thr Thr Leu Ile Ala Lys		
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Leu Lys Ser Asp Gly Ile Pro Met Tyr Lys Arg Asn Val Met Ile Leu		
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Thr Asn Pro Val Ala Ala Lys Lys Asn Val Ser Ile Asn Thr Val Thr		
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Tyr Glu Trp Ala Pro Pro Val Gln Asn Gln Ala Leu Ala Arg Gln Tyr		
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Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
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&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3822

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Gln	Arg	Arg	Leu	Leu	Trp	Cys	Tyr	His	Lys	Asn	Leu	Glu	Asp	Leu	Gly
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&lt;211&gt; 6280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3823

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<213> Homo sapiens

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&lt;211&gt; 2051

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3825

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<213> Homo sapiens

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&lt;211&gt; 1245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3827

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&lt;213&gt; Homo sapiens

&lt;400&gt; 3829

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&lt;210&gt; 3830

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3830

Phe Lys Glu Phe Leu Asp Leu Leu Gly Asp Thr Ile Thr Leu Gln Asp  
 1 5 10 15  
 Phe Lys Gly Phe Arg Gly Gly Leu Asp Val Thr His Gly Gln Thr Gly  
 20 25 30  
 Val Glu Ser Val Tyr Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3831

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180
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600
agcgcagcca ccactccac agttgagaat gaacagcctt ccctcgtttg ggttgacaga
660
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720
gctcag
726

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&lt;210&gt; 3832

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3832

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Met Ser Ser His Ser Val Leu Pro Ala Glu Ser Leu Arg Ala Cys Glu
 1          5          10          15
Phe Ser Pro Glu Thr Asp Pro Leu Xaa Val Ser Gln Ile Pro Ala Ser
          20          25          30
Leu Ser Ser Ala Leu Ala Cys Tyr Gly Leu Ser Phe Leu Gln Leu His
          35          40          45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
          50          55          60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
65          70          75          80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
          85          90          95
Ile Ser Phe Leu Leu Thr Val Gln Thr Phe
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&lt;210&gt; 3833

&lt;211&gt; 1764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3833

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 1764

<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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Pro	Ala	Ser	Ala	Gly	Gly	Gly	Ala	Ser	Ser	Gln	Pro	Arg	Lys	Lys	Leu	20	25	30	
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp	35	40	45	
Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro	50	55	60	
Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr	65	70	75	80
Ile	Ile	Ala	Arg	Thr	Lys	Gly	Leu	Ser	Ile	Leu	Thr	His	Asp	Val	Gln	85	90	95	
Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val	100	105	110	
Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala	115	120	125	
Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro	130	135	140	
Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu	145	150	155	160
Gln	Gly	Cys	Ala	Val	Leu	Arg	Ala	Thr	Pro	Leu	Ala	Asp	Met	Thr	Pro	165	170	175	
Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe	180	185	190	
Leu	Thr	Asp	Ala	Cys	Ala	Leu	Ala	Ser	Asp	Lys	Ser	Arg	Asp	Arg	Phe	195	200	205	
Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala	210	215	220	
Ser	Ala	Leu	Leu	Ala	Cys	Val	Arg	Glu	Val	Lys	Val	Ala	Pro	Ser	Glu	225	230	235	240
Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala	245	250	255	
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg	260	265	270	
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu	275	280	285	
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys				

290		295		300
Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp				
305		310		315
His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
	325		330	335
Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu				
	340		345	350
Pro Pro Val Asn Ser Asn Ser Val Asn				
	355		360	

&lt;210&gt; 3835

&lt;211&gt; 2366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3835

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 2366

&lt;210&gt; 3836

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3836

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Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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Ala	Arg	Ala	Gly	Gly	Ser	Ser	Arg	Gly	Cys	Trp	Tyr	Tyr	Leu	Arg	Tyr	
	50					55					60					
Phe	Phe	Leu	Phe	Val	Ser	Leu	Ile	Gln	Phe	Leu	Ile	Ile	Leu	Gly	Leu	
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Val	Leu	Phe	Met	Val	Tyr	Gly	Asn	Val	His	Val	Ser	Thr	Glu	Ser	Asn	
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			100					105					110			
Gly	Leu	Thr	Ala	Ser	Gln	Ser	Asn	Leu	Thr	Lys	Glu	Leu	Asn	Phe	Thr	
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Thr	Arg	Ala	Lys	Asp	Ala	Ile	Met	Gln	Met	Trp	Leu	Asn	Ala	Arg	Arg	
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Asp	Leu	Asp	Arg	Ile	Asn	Ala	Ser	Phe	Arg	Gln	Cys	Gln	Gly	Asp	Arg	
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Val	Ile	Tyr	Thr	Asn	Asn	Gln	Arg	Tyr	Met	Ala	Ala	Ile	Ile	Leu	Ser	
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Glu	Lys	Gln	Cys	Arg	Asp	Gln	Phe	Lys	Asp	Met	Asn	Lys	Ser	Cys	Asp	
			180					185					190			
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Ile	Ala	Lys	Glu	Lys	Thr	Ile	Cys	Thr	Lys	Asp	Lys	Glu	Ser	Val	Leu	
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				245					250					255		
Lys	Val	Gln	Ala	Leu	Cys	Leu	Pro	Leu	Asp	Lys	Asp	Lys	Phe	Glu	Met	
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Asp	Leu	Arg	Asn	Leu	Trp	Arg	Asp	Ser	Ile	Ile	Pro	Arg	Ser	Leu	Asp	
		275					280					285				
Asn	Leu	Gly	Tyr	Asn	Leu	Tyr	His	Pro	Leu	Gly	Ser	Glu	Leu	Ala	Ser	
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Ile	Arg	Arg	Ala	Cys	Asp	His	Met	Pro	Ser	Leu	Met	Ser	Ser	Lys	Val	
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Glu	Glu	Leu	Ala	Arg	Ser	Leu	Arg	Ala	Asp	Ile	Glu	Arg	Val	Ala	Arg	
				325					330					335		
Glu	Asn	Ser	Asp	Leu	Gln	Arg	Gln	Lys	Leu	Glu	Ala	Gln	Gln	Gly	Leu	
			340					345					350			
Arg	Ala	Ser	Gln	Glu	Ala	Lys	Gln	Lys	Val	Glu	Lys	Glu	Ala	Gln	Ala	
		355					360					365				
Arg	Glu	Ala	Lys	Leu	Gln	Ala	Glu	Cys	Ser	Arg	Gln	Thr	Gln	Leu	Ala	
	370				375						380					
Leu	Glu	Glu	Lys	Ala	Val	Leu	Arg	Lys	Glu	Arg	Asp	Asn	Leu	Ala	Lys	
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465

470

475

&lt;210&gt; 3837

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3837

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 2084

&lt;210&gt; 3838

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3838

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Ile	Lys	Ser	Ile	Leu	Pro	Gly	Arg	Ser	Cys	Asp	Leu	Leu	Gln	Asp	Thr
			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65					70				75						80
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
		115					120					125			
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130					135						140			
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155					160
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
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<210> 3839
<211> 758
<212> DNA
<213> Homo sapiens
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120
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180
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240
ctaaccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact
300
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 420  
 ggacacaacc tgcacagac tggcccagcc cctccccctg ctgtgtctga gtccctggcct  
 480  
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 cctcctgctg gctctgcctt ggatccatcc tatgggcctc tgctgatgcc ttcagtgcac  
 660  
 gcggccagga ttctgtctcc ccagtgtgac atcacaaaga cagaaccaac tacagtcacc  
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<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

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Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Gln	Pro	Ala	Glu
			20						25				30		
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65					70					75				80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
				85					90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105					110		
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115					120					125			
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130					135					140				
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145					150					155				160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
				165					170					175	
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185					190		
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
		195					200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
	210					215					220				
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
225					230					235				240	
Ser	Ala	Thr	Ser	Ala	Trp	Ala	Gly	Ala	Phe	His	Gly				

245

250

<210> 3841  
<211> 367  
<212> DNA  
<213> Homo sapiens

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240  
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367

<210> 3842  
<211> 122  
<212> PRT  
<213> Homo sapiens

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Ala Gly Tyr Trp Val Ser Thr Cys Trp Gly Leu Ser Phe Val Val Pro  
20 25 30  
Gly Ala Ile Val Ala Ala Met Gly Ile Val Cys Phe Leu Phe Leu Ile  
35 40 45  
Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser  
50 55 60  
Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile  
65 70 75 80  
Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu  
85 90 95  
Leu Leu Ser Asp Gly Lys Gly Ser Ile His Pro Asn His Val Val Ile  
100 105 110  
Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala  
115 120

<210> 3843  
<211> 712  
<212> DNA  
<213> Homo sapiens

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 120  
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 180  
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 300  
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 420  
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 660  
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 712

&lt;210&gt; 3844

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3844

Met	Ala	His	Val	Gly	Ser	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser
1				5					10					15	
Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Lys	Ser	Arg	Lys	Asp	Thr
			20					25					30		
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35					40					45			
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50					55				60					
Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65					70					75				80	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85						90					95	
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
		100						105					110		
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
		115					120					125			
Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
	130					135					140				

&lt;210&gt; 3845

&lt;211&gt; 2302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3845

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 2280  
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 2302

&lt;210&gt; 3846

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3846

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Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Ala	Glu	35	40	45	
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly	50	55	60	
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly	65	70	75	80
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly	85	90	95	
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg	100	105	110	
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu	115	120	125	
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu	130	135	140	
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg	145	150	155	160
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly	165	170	175	
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Cys Cys Phe Pro Gly  
195

185

190

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<212> DNA  
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3848

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<212> DNA

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